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A Graphic Summary of

World

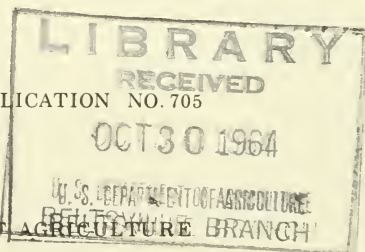
Agriculture

MISCELLANEOUS PUBLICATION NO. 705

U.S. DEPARTMENT OF AGRICULTURE
REGIONAL ANALYSIS DIVISION

ECONOMIC RESEARCH SERVICE

REGIONAL ANALYSIS DIVISION



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This revision of *A Graphic Summary of World Agriculture, 1949*, is based on data available in Department of Agriculture publications, supplemented by material from other sources, notably publications of the Food and Agriculture Organization of the United Nations. The author acknowledges with thanks the assistance of his associates in the Regional Analysis Division and in the Cotton and Tobacco Divisions, Foreign Agricultural Service, who compiled the data for most of the maps and charts and supplied the accompanying text. Special thanks are due to Robert G. Leginus, Jerry L. Barringer, and Diane Britten, who helped prepare the maps and charts.

Revised September 1964

A Graphic Summary of World Agriculture

By Nelson P. Guidry, Geographer

*Regional Analysis Division
Economic Research Service*

THESE MAPS AND CHARTS show the geographic distribution of the world's principal crops and livestock, the physical features that largely determine that distribution, the trade in farm products by regions, and the relation between population and food supplies.

Crops are cultivated on about 3.5 billion acres of cropland, or little more than 10 percent of the earth's 33.5 billion acres of land (excluding the Antarctic). Estimates suggest that another 15-20 percent is under permanent meadows, pastures, and rangeland available for grazing livestock.

These 3.5 billion acres of cropland provide the largest share of the world's supply of food and natural fiber as well as substantial quantities of feed for livestock. They are unevenly distributed among countries and in relation to population. The United States, the Soviet Union, India, and Mainland China together have nearly half of the cropland. On the basis of cropland per capita, however, sparsely populated Australia, Canada, and Argentina take first place, and overcrowded India and Mainland China rank low.

Adding to the imbalance between population and farm output are such factors as variations in climate, soils, patterns of agricultural production, and the level of agricultural technology. Progress in the application of modern farming techniques generally has been rapid in the highly developed countries, which have the skilled manpower and can more easily afford the needed large capital investment than underdeveloped regions. It has helped to keep farm output per capita at high levels in temperate North America and Oceania, and above the world

average in densely populated Western Europe.

The relatively high value of per capita consumption as well as production in all these regions reflects mainly the high quality of their diets. Even so, the United States, Canada, Australia, and New Zealand produce more than they consume. But Western Europe is a net importer of farm products. By far the largest outlet for exportable surpluses from other parts of the world, this highly industrialized region relies chiefly on manufactures to pay for imports of food and raw materials.

In contrast, the densely populated Far East, including South and East Asia, does not produce enough food and things that can be traded for food to provide its inhabitants with more than a meager diet. With more than half of the world's population, it accounts for less than a third of the value of world farm output, and net imports of agricultural products are small. The value of consumption per capita is also low in many countries of West Asia, Africa, and Latin America, where population pressure on the land is not nearly so heavy as in the Far East and where exports of agricultural products exceed imports by a large margin.

In all of these underdeveloped regions, agriculture is the major economic activity and the major earner of foreign exchange. In none of them, however, does the value of gross agricultural trade reach as high a level as in the industrialized regions of Western Europe or temperate North America, which together accounted for 43 percent of world agricultural exports and 67 percent of world agricultural imports in 1961.

Principal Classes of Landforms

4



Average Annual Precipitation



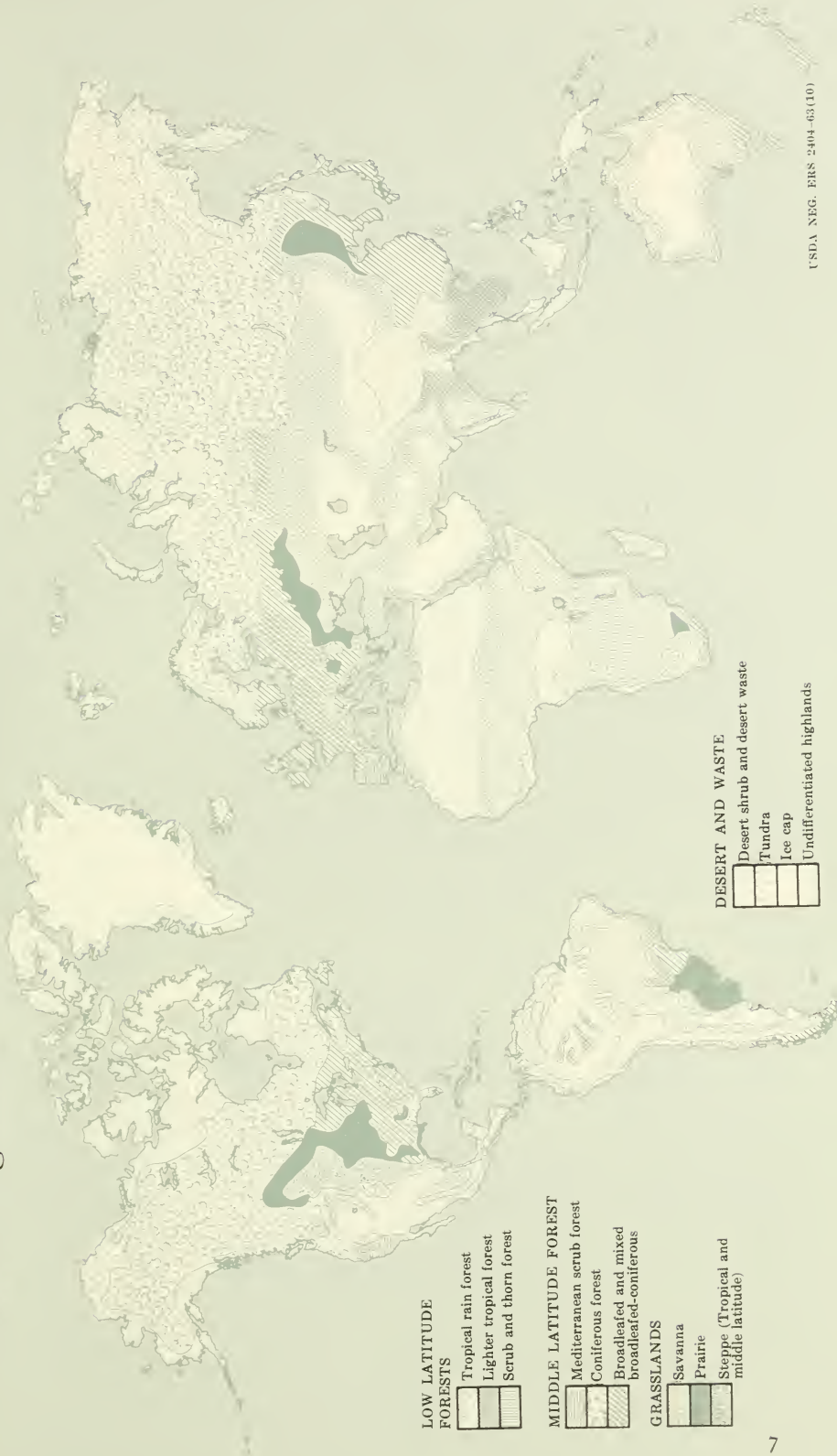
Primary Groups of Soils

6



*Many small but important areas, not shown on map, occur in all parts of the world.

Natural Vegetation



LOW LATITUDE FORESTS

- Tropical rain forest
- Lighter tropical forest
- Scrub and thorn forest

MIDDLE LATITUDE FOREST

- Mediterranean scrub forest
- Coniferous forest
- Broadleaved and mixed broadleaved-coniferous

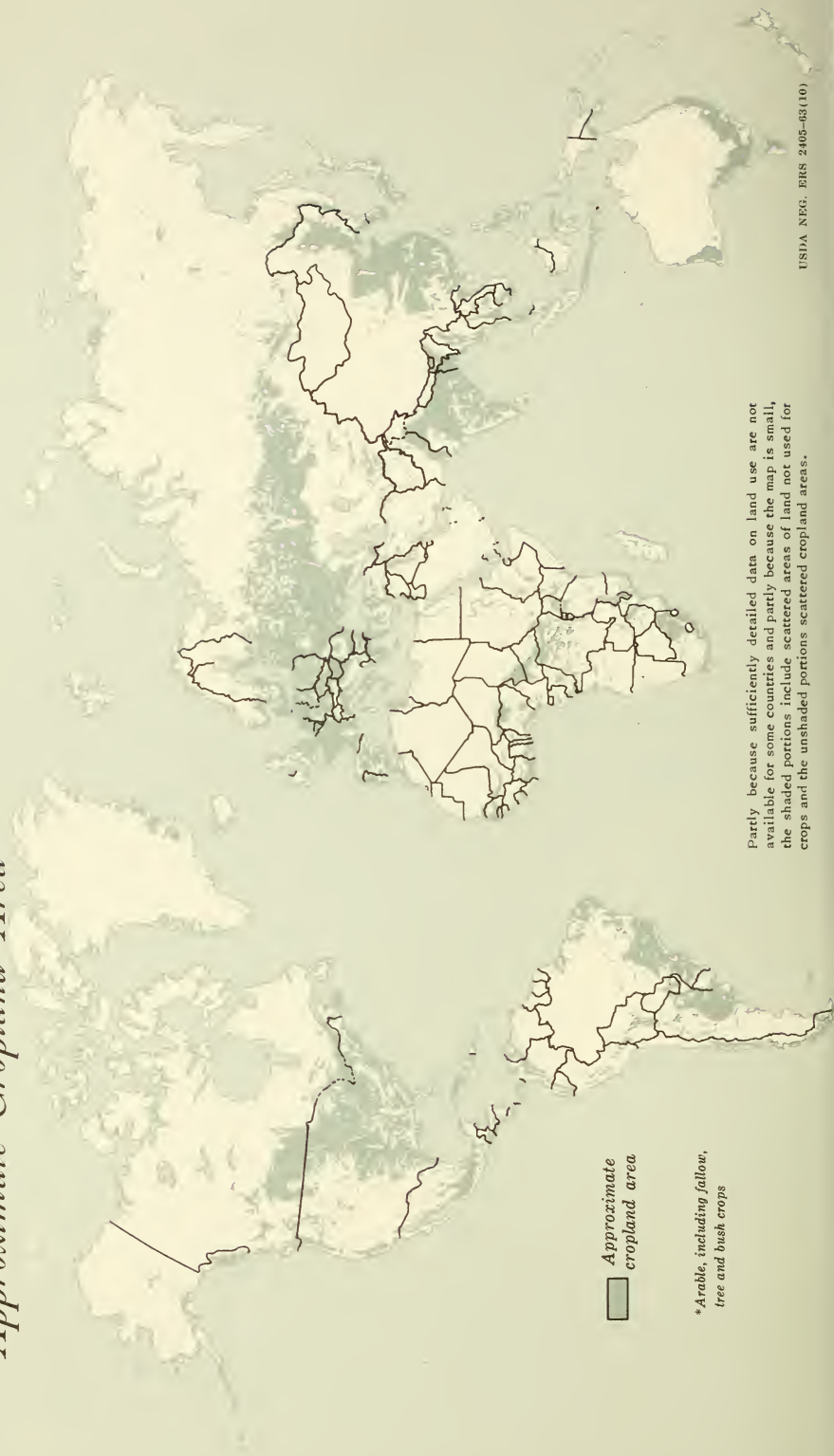
GRASSLANDS

- Savanna
- Prairie
- Steppe (Tropical and middle latitude)

DESERT AND WASTE

- Desert shrub and desert waste
- Tundra
- Ice cap
- Undifferentiated highlands

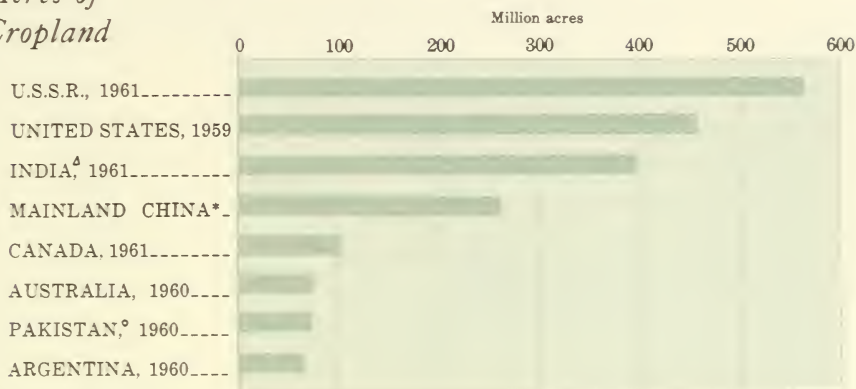
Approximate Cropland Area*



Partly because sufficiently detailed data on land use are not available for some countries and partly because the map is small, the shaded portions include scattered areas of land not used for crops and the unshaded portions scattered cropland areas.

Cropland: 8 Leading Countries*

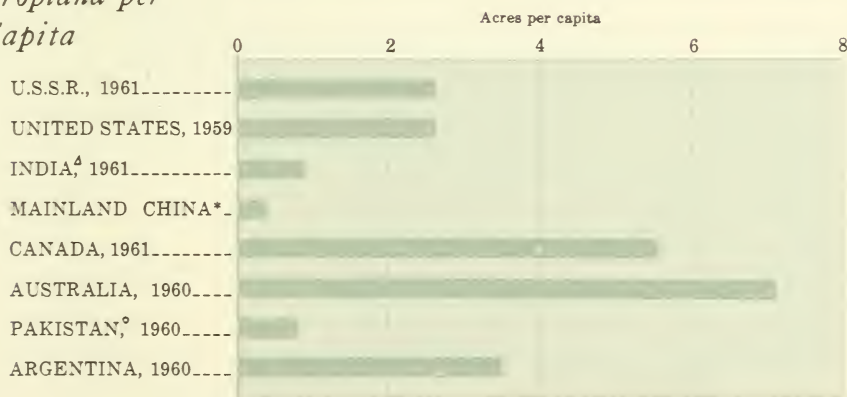
Acres of Cropland



Cropland as a Percent of Total Land



Cropland per Capita



*Arable, including fallow, tree and bush crops

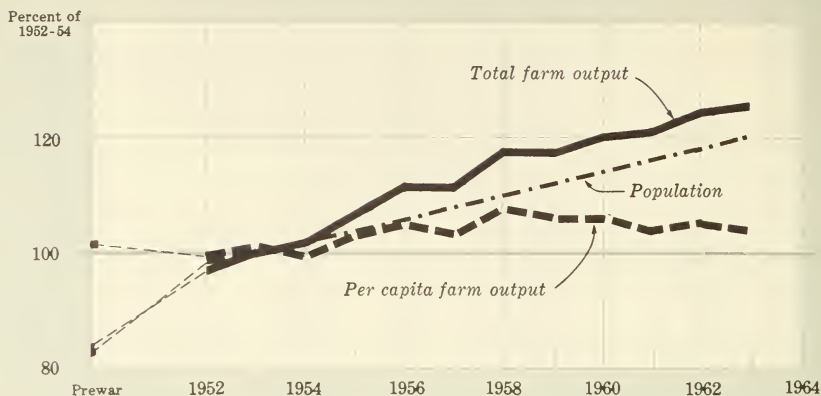
^ΔIncludes Jammu and Kashmir, status in dispute

[°]Excludes Jammu and Kashmir

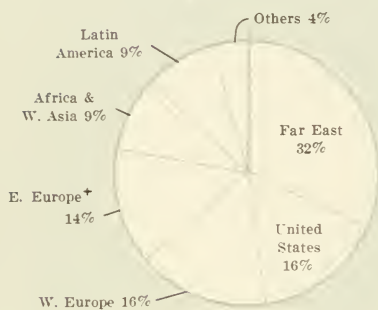
* 1961

USDA NEG. ERS 2406-63(10)

World Farm Output, Trade, and Population

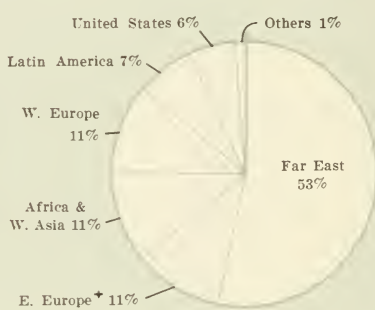


FARM OUTPUT, 1958



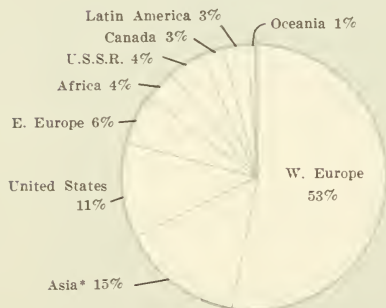
TOTAL 168 billion dollars

POPULATION, 1958



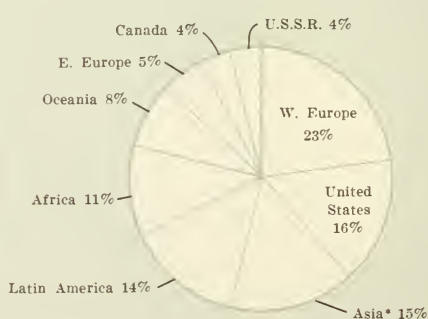
TOTAL 2.9 billion

AGRICULTURAL IMPORTS, 1961



TOTAL 34 billion dollars

AGRICULTURAL EXPORTS, 1961



TOTAL 31 billion dollars

* Including U.S.S.R.

* Excluding Communist Asia

USDA NEG. ERS 2407-63(10)

World Population, 1961

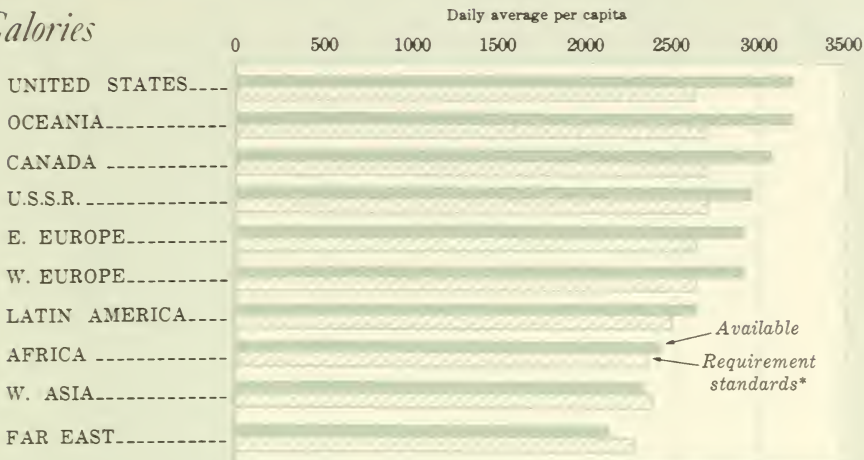


Levels of Food Consumption, 1958



Food Requirements and Availabilities, 1958

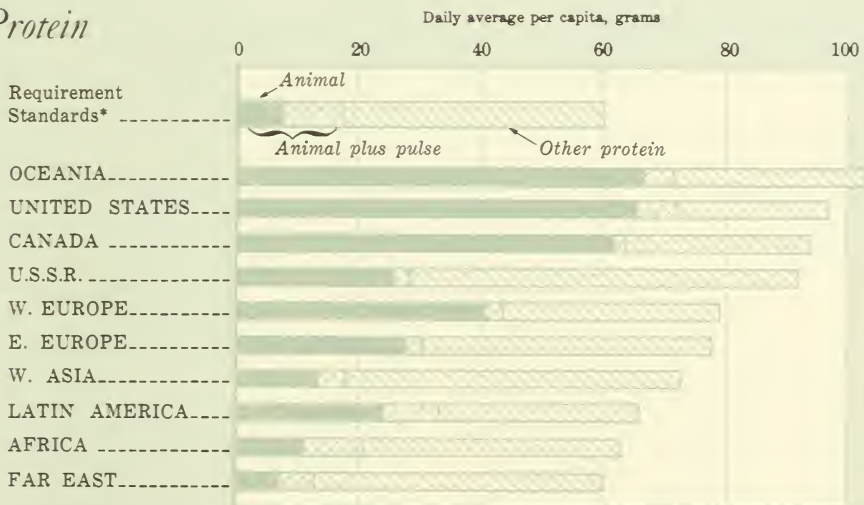
Calories



*Based on standards developed by Food and Agricultural Organization and published in *Second World Food Survey, 1952*. Represent physiological requirements for normal health and activity taking account of variations in climate, body size, and the proportion of adults and children in the population,

plus a 15 percent allowance to adjust to retail level of consumption. The reference standards are at best only rough guides to requirements and obviously make no allowance for inequities in distribution among population groups.

Protein

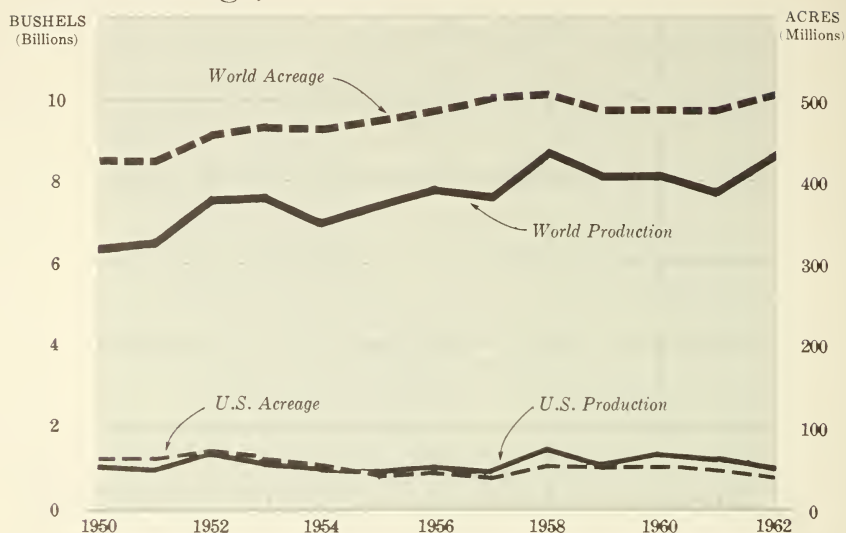


*Uniform for all regions. The total protein reference standard is regarded as adequate and takes account of the predominance of vegetable protein in the diet of many countries. The animal protein standard, on the other hand, is exceptionally low

and should not be regarded as a desirable level in diets generally in the world. Since pulse protein, like animal protein, is effective in supplementing grain protein, a standard has been provided for a total of animal and pulse protein.

USDA NEG. ERS 2410-63(10)

Wheat: World and U.S. Production and Acreage, 1950-62



USDA NEG. ERS 2411-63(10)

GRAINS are the leading crops. Used both for food and feed, they occupy nearly half of all cropland and figure prominently in the diet of most countries. Only in the United States and parts of tropical Africa do grains furnish less than a fourth of the calorie value of the food supply. In most of Asia and northern Africa, this proportion approaches or exceeds two-thirds.

Wheat, produced widely in the Temperate Zones, ranks first in area and production. It also stands out as a major food grain. Even in the relatively few countries where wheat is fed to livestock, most wheat supplies are consumed as food.

World production of wheat has shown a considerable increase since 1950. It averaged 16 percent higher in 1957-1961 than in 1950-1954. All regions, especially the Soviet Union, contributed to the increase. Expansion

of wheat cultivation east of the Urals gave the Soviet Union nearly a third of world wheat acreage in 1957-1961, although it harvested less than one-fourth of the world wheat crop.

In the United States, the second largest wheat-producing country, Government controls brought a reduction in acreage, but yields increased. With less than a third as much land in wheat as the Soviet Union, the United States in 1957-1961 harvested nearly two-thirds as much wheat (charts, p. 18).

Yields per acre also increased in Western and Eastern Europe, which together produce about as much wheat as the Soviet Union or all Asia. Western Europe has the highest wheat yields per acre—an average of 29 bushels in 1957-1961, compared with 24 bushels in the United States and 12 bushels in the Soviet Union.

World Wheat Production, Average 1957-61



Orientation Map



KEY TO NAMES OF COUNTRIE

1. BR. HONDURAS
2. HONDURAS
3. TRINIDAD and TOBAGO
4. DENMARK
5. NETHERLANDS
6. BELGIUM
7. LUXEMBOURG
8. FED. REP. OF GERMANY
9. EAST GERMANY
10. SWITZERLAND
11. AUSTRIA
12. CZECHOSLOVAKIA
13. HUNGARY

14. YUGOSLAVIA
15. RUMANIA
16. ALBANIA
17. GREECE
18. BULGARIA
19. ANDORRA
20. MONACO
21. ITALY
22. LIECHTENSTEIN
23. SAN MARINO
24. CYPRUS
25. LEBANON
26. ISRAEL

27. SYRIA
28. JORDAN
29. KUWAIT
30. YEMEN
31. MUSCAT and OMAN
32. U.A.R. (EGYPT)
33. GAMBIA
34. PORT. GUINEA
35. GUINEA
36. SIERRA LEONE
37. LIBERIA
38. UPPER VOLTA
39. TOGO



- 40. DAHOMEY
- 41. RIO MUNI
- 42. CAMEROON
- 43. CENTRAL AFRICAN REP.
- 44. FR. SOMALILAND
- 45. UGANDA
- 46. KENYA
- 47. RWANDA
- 48. BURUNDI
- 49. N. RHODESIA
- 50. S. RHODESIA
- 51. MALAWI (NYASALAND)
- 52. MOZAMBIQUE

- 53. BECHUANALAND
- 54. SWAZILAND
- 55. BASUTOLAND
- 56. JAMMU and KASHMIR
(In Dispute)
- 57. NEPAL
- 58. BHUTAN
- 59. E. PAKISTAN
- 60. THAILAND
- 61. LAOS
- 62. CAMBODIA
- 63. VIET-NAM
- 64. MALAYSIA

BOUNDARY REPRESENTATION IS
NOT NECESSARILY AUTHORITY

USDA NEG. ERS 2413-63(10)

Orientation Map



Members of
European Economic
Community - EEC
or Common Market

France
Belgium
Netherlands
Luxembourg
W. Germany
Italy

KEY TO NAMES OF COUNTRIES

1. BR. HONDURAS
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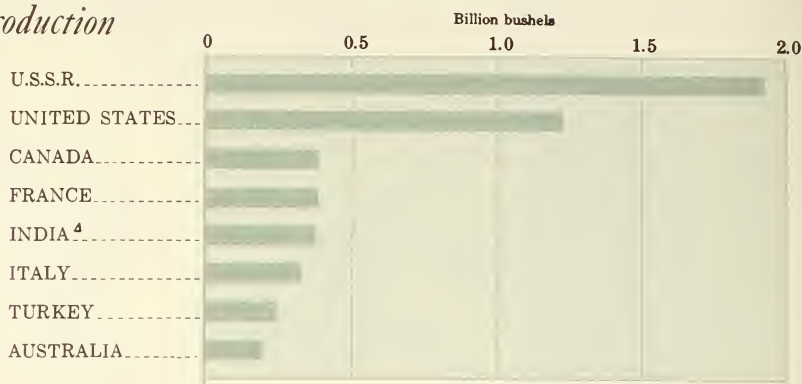
BOUNDARY REPRESENTATION IS
NOT NECESSARILY AUTHORITY

USDA NEG. ERS 2413-63(10)

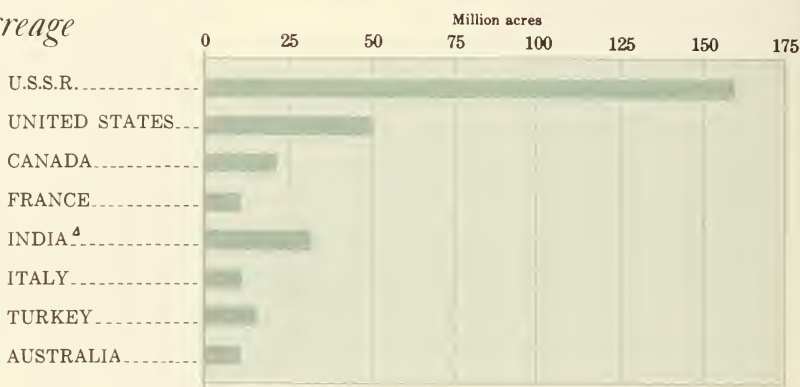
Wheat: 8 Leading Producers*

Average 1957-61

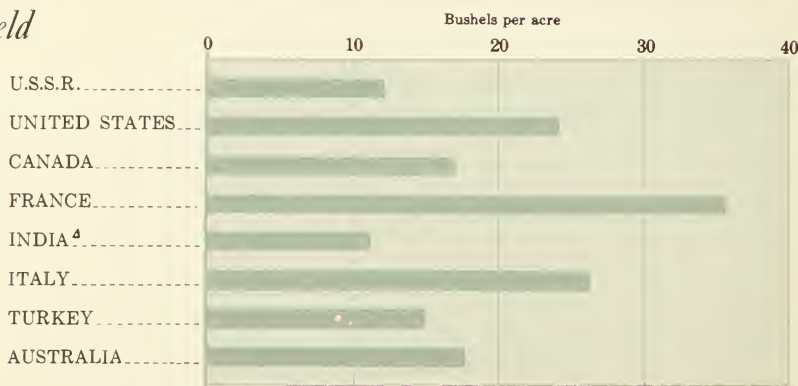
Production



Acreage



Yield

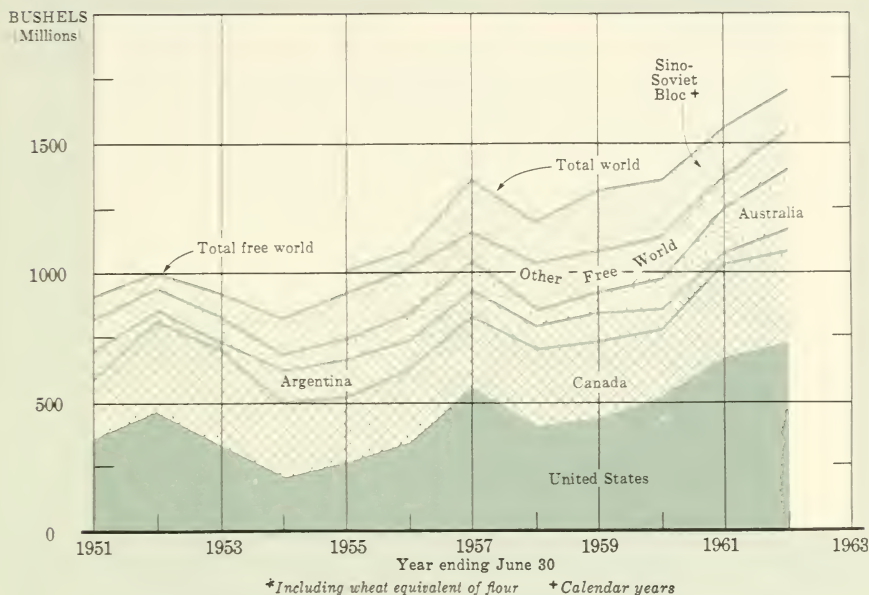


*Excluding Mainland China

^Δ Includes Jammu and Kashmir, status in dispute

USDA NEG. ERS 2414-63 (10)

World Wheat Exports, 1951-62*



USDA NEG. ERS 2415-63 (10)

Whereas world wheat production leveled off after 1958, world exports of wheat, including the wheat equivalent of flour, continued to trend upward. At their postwar peak in 1961-1962, exports amounted to some 1.7 billion bushels, or about one-fifth of world production. The United States alone shipped out 718 million bushels and Canada another 338 million.

Other major wheat-exporting countries include Argentina and Australia, together with France, which usually account for most of the remaining free world exports, and the Soviet Union, which accounts for most of Soviet-bloc exports. Soviet-bloc data are reasonably complete only for the years after 1954.

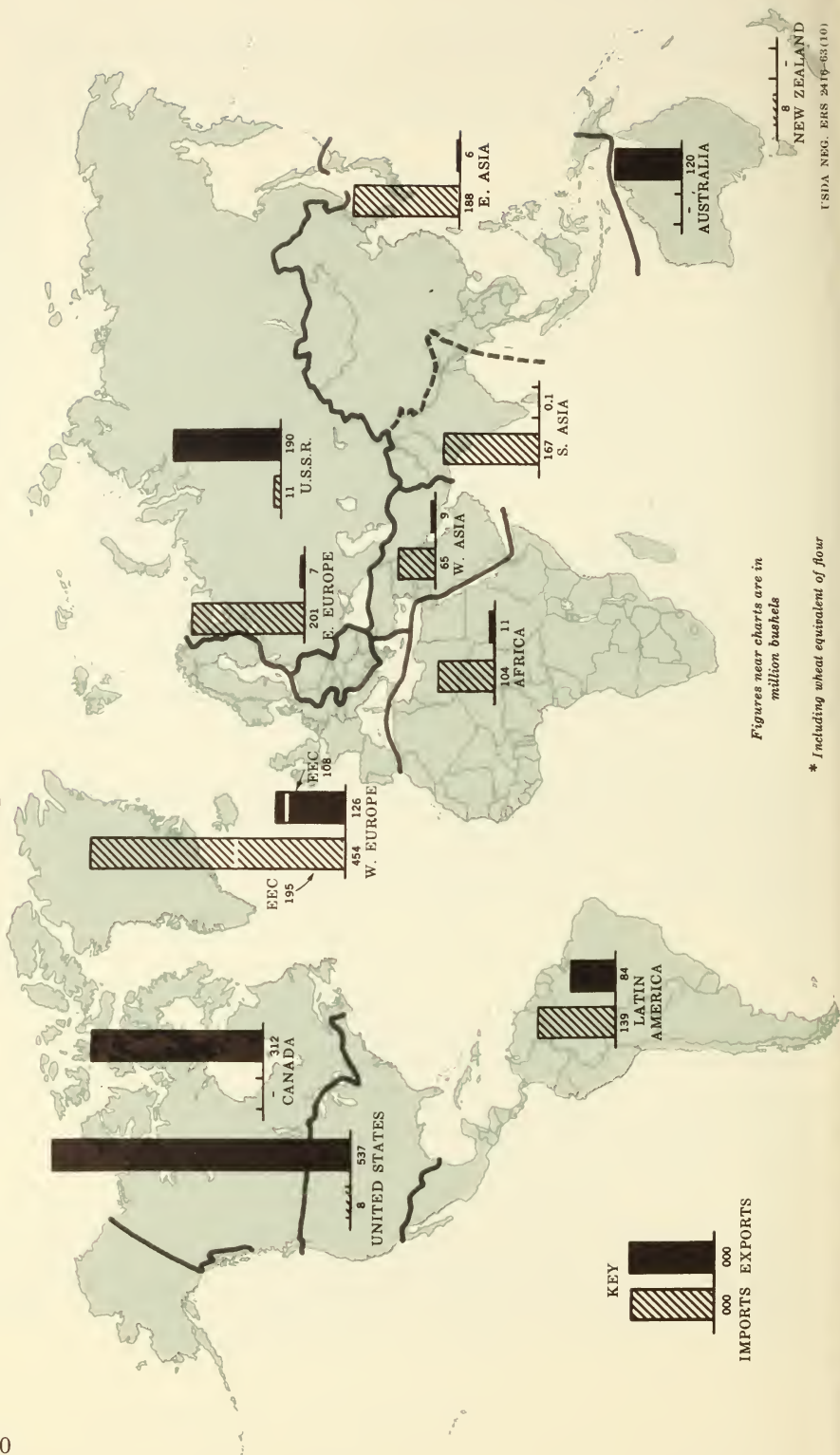
Western Europe is the great traditional market for wheat exports, and it still remains the major importing region (map, p. 20). But in 1957-1961, Eastern European countries imported

an average of about 201 million bushels a year, and Far Eastern countries 335 million, compared with 454 million for Western Europe. Imports into Latin America and Africa were also substantial and exceeded exports.

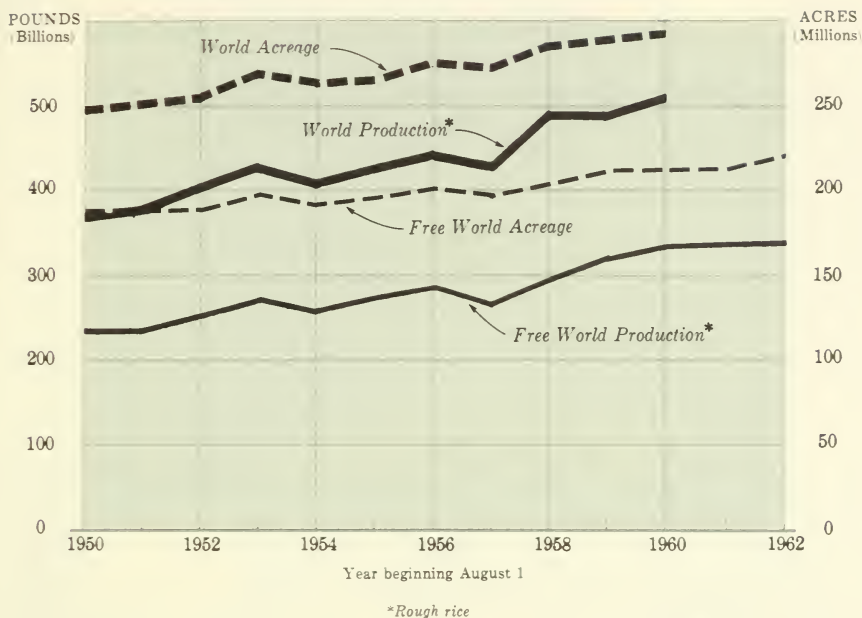
A little more than half of Far Eastern imports were taken by East Asia in 1957-1961 and a little less than half by South Asia. Japan is usually the leading importer in East Asia, but in 1961 it yielded first place to Mainland China, which suddenly became a large cash market for wheat. India is the leading importer in South Asia, followed by Pakistan. Those countries have obtained most of their wheat imports from the United States on concessional terms under Public Law 480.

The bulk of the wheat entering world trade is shipped as grain. Flour expressed in wheat equivalent represented about one-seventh of world exports in 1957-1961.

World Trade in Wheat, Average 1957-61*



Rice: World Production and Acreage, 1950-62



RICE rivals wheat as a food grain. It is the staple food of the populous Far East, although parts of this region also produce substantial quantities of wheat, barley, corn, millet, and sorghums, with consequent local variations in diet. Rice has also become an important crop in some countries of the Americas, Europe, Africa, and West Asia, but production remains heavily concentrated in the Far East (map, p. 22).

Mainland China ranks first among rice-growing countries. Estimates indicate that it produced more than one-third of the world rice crop in the late fifties. Its contribution since then is difficult to guess, so fragmentary are the data available on the rice output of Mainland China in recent years.

Production in the free world has increased steadily in the past decade.

The annual output averaged 24 per cent higher in 1957-1961 than in 1950-1954. India, the world's second largest rice producer, accounted for a third of the free world total in both periods. Japanese output increased still more than India's. With only a small share of the world's riceland but much higher yields per acre than any of the leading producers, Japan ranked third in production in 1957-1961 (charts, p. 23).

Gains in output also have been relatively large in Brazil and some of the lesser rice-growing countries. They have been less than the free world average in Pakistan and in Burma and Thailand, usually the principal exporters of rice. In Mediterranean Europe and the United States, production in 1957-1961 showed no increase over the 1950-1954 level.

World Rice Production, Average 1957-61*

22



Each dot represents
100,000,000 pounds

*Rough rice

PERCENT OF
WORLD PRODUCTION

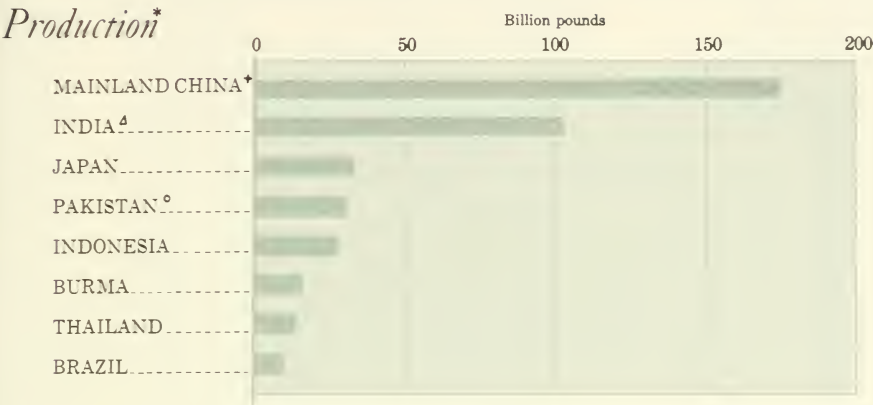


TOTAL 498,280,900,000 pounds

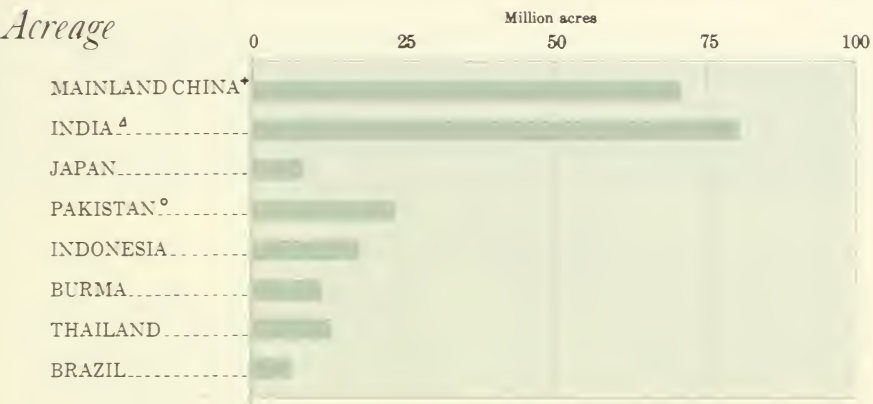
Rice: 8 Leading Producers

Average 1957-61

Production*



Acreage



Yield*



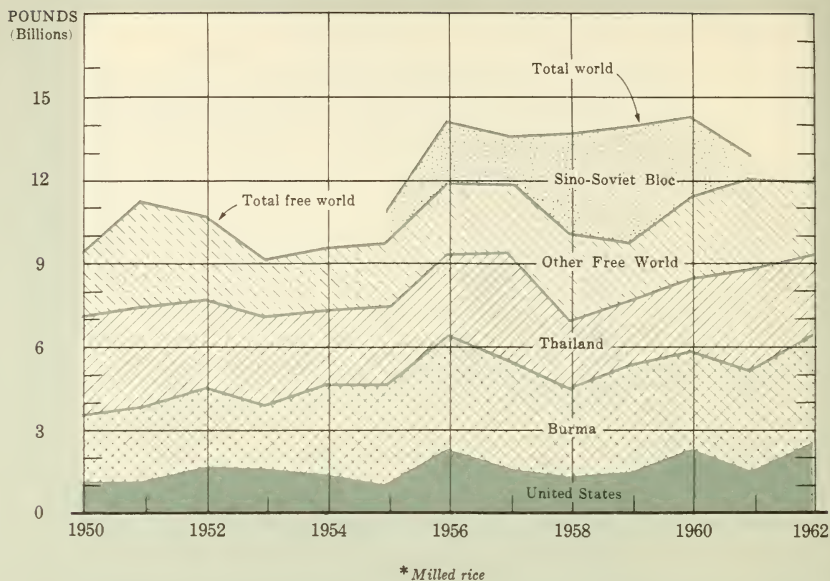
*Rough rice

*Average 1957-60

^ΔIncludes Jammu and Kashmir, status in dispute

[◊]Excludes Jammu and Kashmir

World Rice Exports, 1950-62*



USDA NEG. ERS 2420-63(10)

WORLD EXPORTS of rice have moved upward since 1950. Though data for the Sino-Soviet countries are incomplete, it is known that Mainland China greatly expanded exports in 1956-1959, only to cut them back sharply after 1960. Free World exports, after dropping off in 1958 and 1959, recovered to reach their postwar high in 1961, when they amounted to little more than 5 percent of Free World production of rice.

Burma is the largest rice-exporting country. Usually Thailand and the United States are next. Other important free world exporters include South Vietnam, Cambodia, United Arab Republic, and Italy. Burma, Thailand, South Vietnam, and Cambodia, the so-called "rice bowl" area, supplied

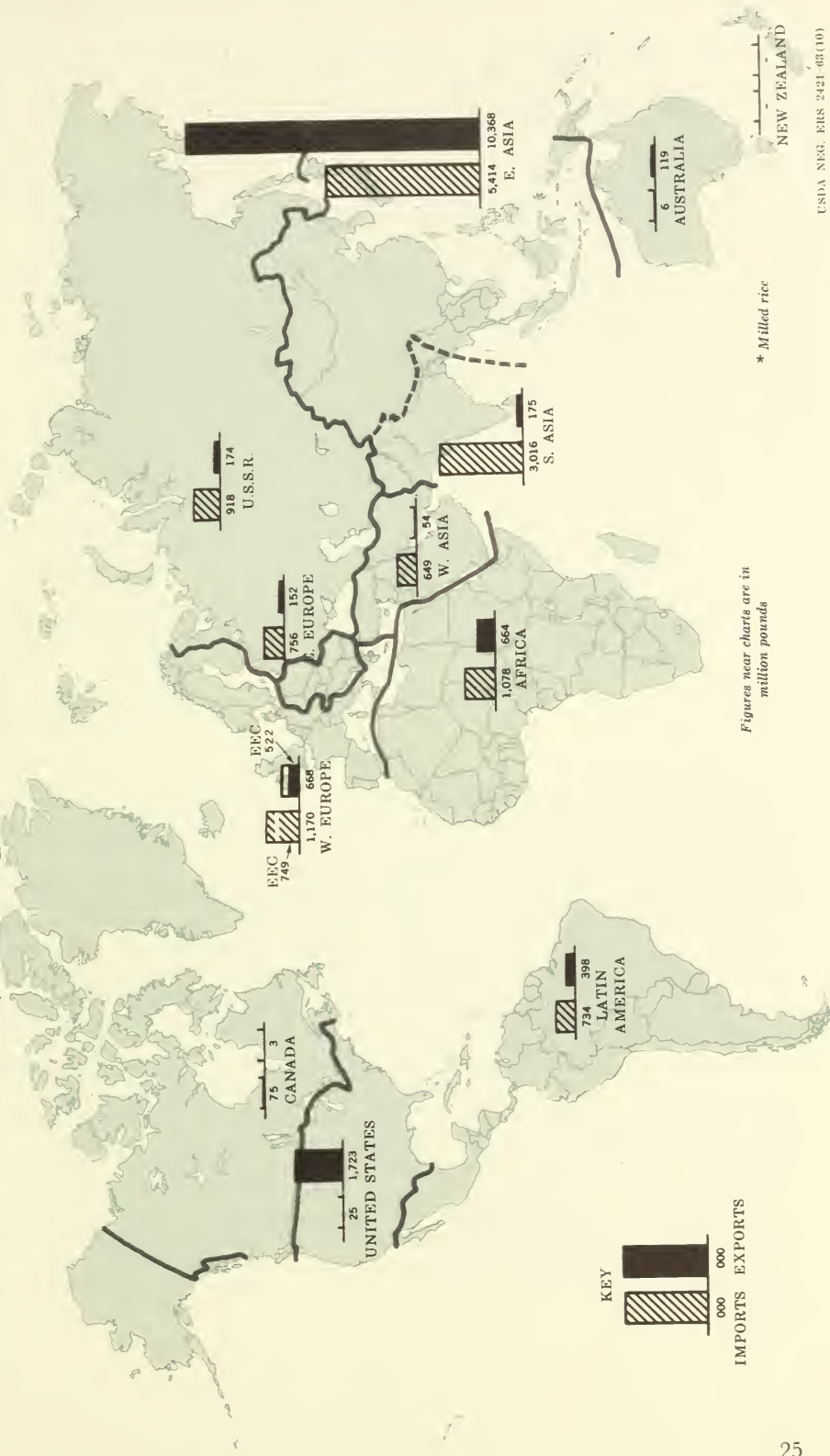
two-thirds of Free World rice exports in 1957-1961.

World trade in rice consists mainly of shipments from one Far Eastern country to another. East Asia imports more rice than South Asia, which in turn imports more than any remaining region of the world (map, p. 25). Indonesia ranks first as a rice importer. Next, in order of importance in 1957-1961, were Malaya-Singapore, India, Ceylon, Hong Kong, and Pakistan. Japan, the largest importer in the early fifties, has since become nearly self-sufficient in rice.

Rice enters international trade channels mostly in milled form. The removal of the outer husk and the bran layers reduces the weight of rough rice by about 28 percent. Polishing reduces it still more.

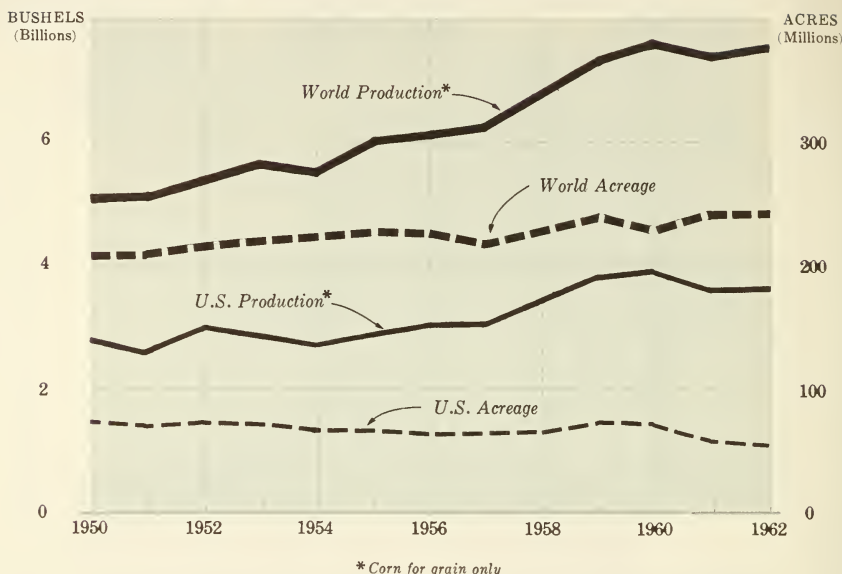
World Trade in Rice, Average 1957-61*

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USDA NEG. ERS 2421-63(10)

Corn: World and U.S. Production and Acreage, 1950-62



USDA NEG. ERS 2422-63(10)

CORN ranks with wheat and rice as one of the world's leading grains. It is widely grown in the Americas, southern Europe, the Soviet Union, Africa, and the Far East (map, p. 27). Many countries use corn largely for food. Others, including the United States, which is the largest producer, exporter, and consumer of corn, feed the great bulk of their supplies to livestock.

Production of corn has shown a strong upward trend in the past decade. With some increase in acreage and marked increases in yields per acre, total output of corn for grain averaged 32 percent higher in 1957-1961 than in 1950-1954.

Unlike most other regions, the United States reduced the area under corn for grain. Though yields per acre rose sharply, the United States

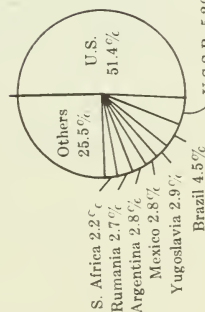
share in total output declined. Nevertheless, in 1957-1961 the United States harvested half the world's corn production from not much more than one-fourth of the world's corn acreage.

Other leading producers have much smaller yields per acre and much less land in corn than the United States (charts, p. 28). All of them, except Mainland China, increased their share in world output as a result of sharp increases in acreages, or yields, or both. Stimulated by the grow-more-corn campaign initiated in the mid-fifties, Soviet production rose to nearly twice the 1950-1954 average in 1957-1961, making the Soviet Union the ranking corn producer after the United States and possibly Mainland China. Even so, it accounted for little more than a tenth of the world total.

World Corn Production, Average 1957-61



PERCENT OF
WORLD PRODUCTION

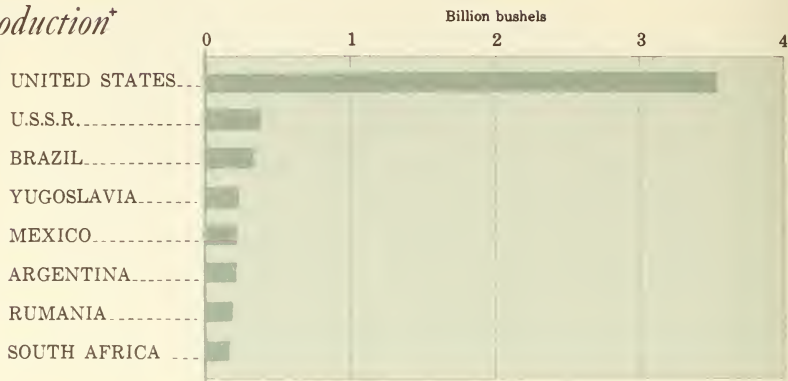


TOTAL 7,229,000,000 bushels

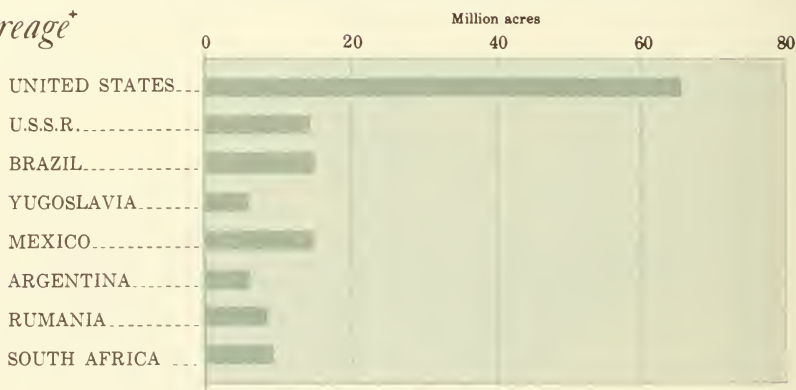
Corn: 8 Leading Producers*

Average 1957-61

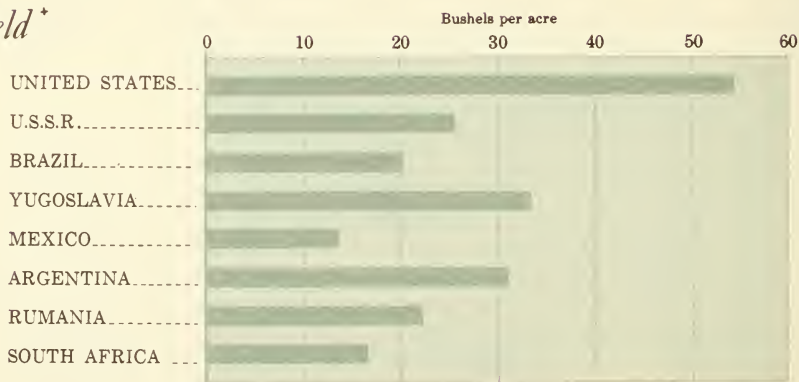
Production*



Acreage*



Yield*

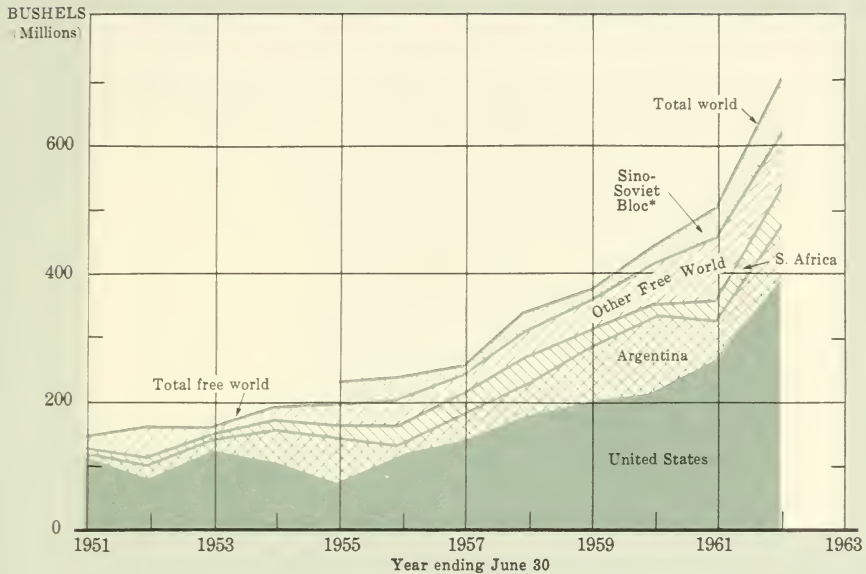


*Excluding Mainland China

*Corn for grain only

USDA NEG. ERS 2424-63(10)

World Corn Exports, 1951-62



*Calendar years

USDA NEG. ERS 2425-63(10)

WORLD EXPORTS of corn have risen rapidly. They still represent only a small part of world production, however—some 8 percent in 1961-1962.

More than half of world exports and about three-fifths of Free World exports come from the United States. United States corn exports increased substantially in each of the seven seasons ending with 1961-1962. During that period, exports from the rest of the Free World likewise moved upward and at a faster rate. The main sources of these exports in one or more recent years have included Argentina, South Africa, France, Yugoslavia, and Thailand. Soviet-bloc exports, in contrast to Free World exports, fluctuated sharply. Rumania usually is the largest bloc exporter of corn, and the U.S.S.R. is second largest.

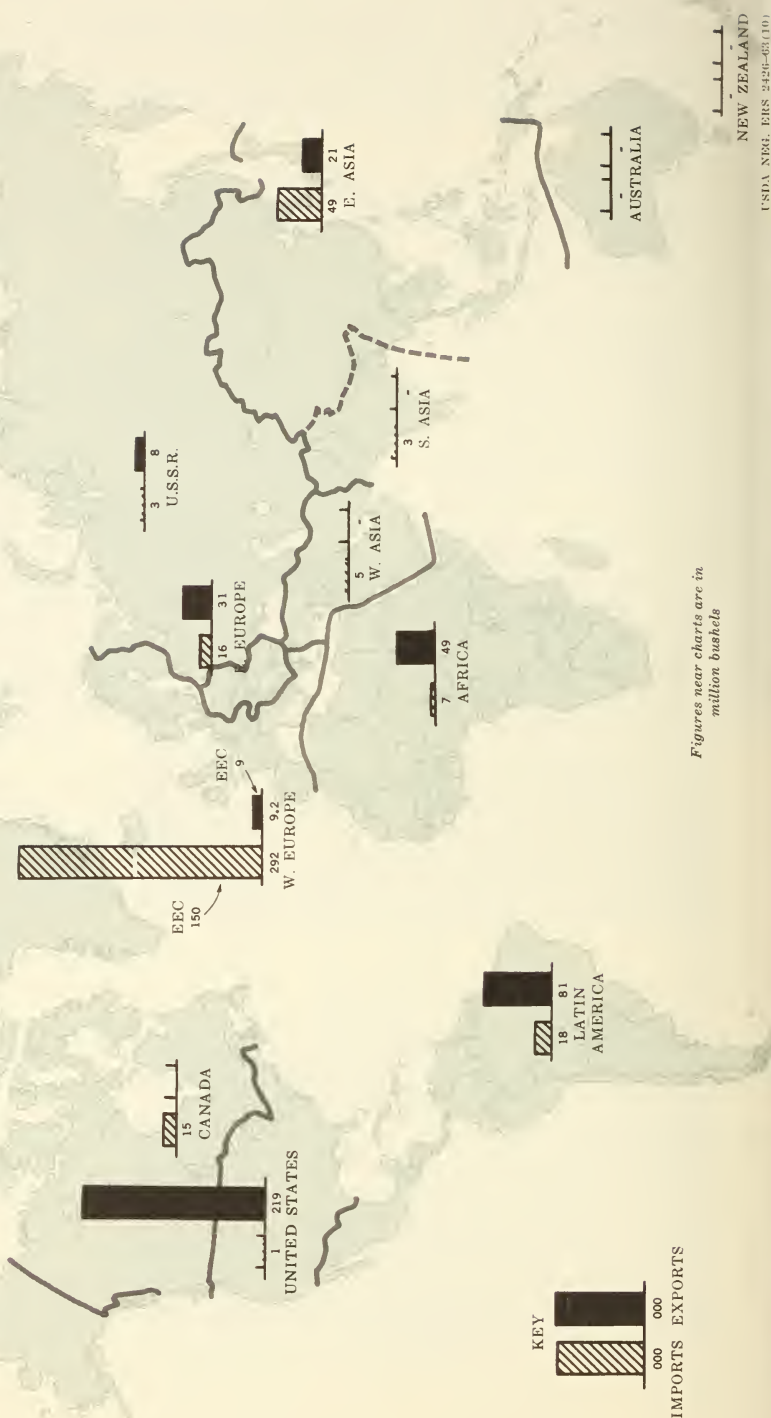
Most exported corn goes to Western Europe (map, p. 30), where an inten-

sive livestock industry depends partly on imports for its supply of concentrates. Members of the European Economic Community—West Germany, France, Italy, the Netherlands, Belgium, and Luxembourg—took nearly 40 percent of world imports, and other Western European countries took more than 30 percent in 1957-1961.

East Asia has become an important region of some importance, accounting for about 12 percent of world imports in 1957-1961. Japan is the region's major importing country. Its demand for imported corn has increased with the rapid expansion of the Japanese livestock industry during the past decade.

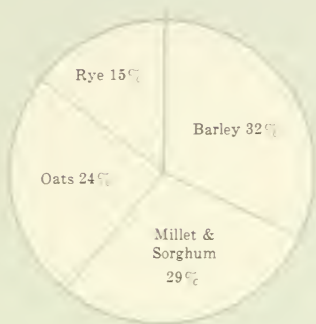
In addition to feed, there is a small trade in corn for food and in corn products.

World Trade in Corn, Average 1957-61

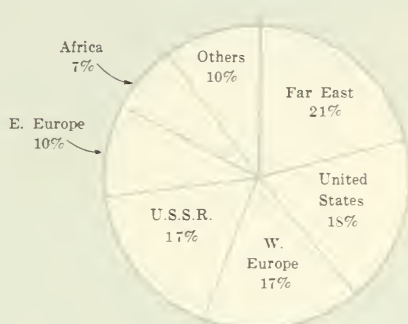


World Production of Rye, Barley, Oats, Millet and Sorghum, Average 1957-61

BY KINDS



BY REGIONS



Total 233 million metric tons

USDA NEG. ERS 2427-63(10)

RYE, BARLEY, OATS, MILLET, AND SORGHUM accounted for 27 percent of world grain production and 18 percent of world grain exports in 1957-1961. Nearly three-fourths of the combined output was grown in the Far East, the United States, Western Europe, and the Soviet Union. The United States ranked first as an exporter, and Western Europe led as an importing region (map, p. 32).

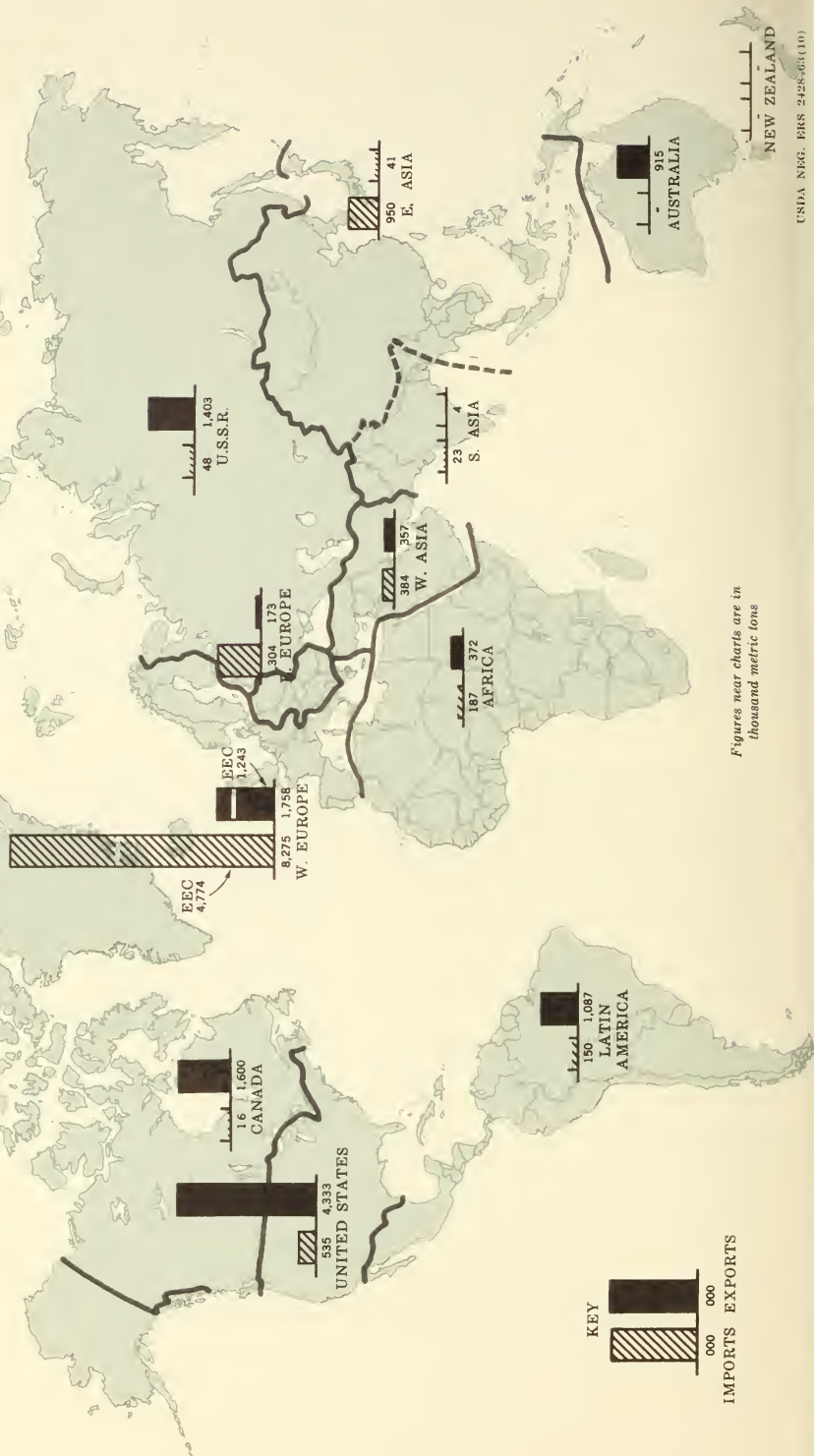
Chief among these grains is barley, mostly a food crop in Asia and Africa and a feed crop elsewhere. Its geographic distribution is similar to that of wheat but extends farther north in Europe and slightly farther into the arid areas of northern Africa and America. Production has increased since the war. It averaged 24 percent more in 1957-1961 than in 1950-1954. Principal producing countries, in order of importance in 1957-1961,

include the U.S.S.R., the United States, Mainland China, France, Canada, and the United Kingdom.

Millet and sorghum, also widely grown, are used mostly for food in Asia and Africa and for feed elsewhere. Total output has probably increased to exceed the 1950-1954 level. Mainland China, India, and the United States lead as producers. The United States is the only exporter of any significance.

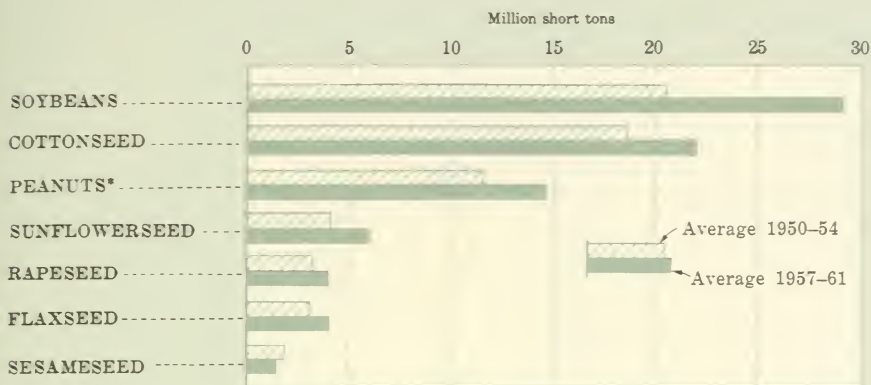
In contrast, production of oats is largely limited to temperate North America, Europe, and the U.S.S.R., and rye to the Soviet bloc. Output of both grains declined between 1950-1954 and 1957-1961—by 7 percent for oats and 5 percent for rye. The decline in oats partly reflects replacement of horses by tractors. In the rye-producing areas, wheat has gained in favor as a food grain.

World Trade in Rye, Barley, Oats, Millet and Sorghum, Average 1957-61



World Output of Selected Oilseeds

Average 1950-54 and 1957-61



*In shell

USDA NEG. ERS 2429-63(10)

OILSEEDS (including oilbearing tree fruits) are the source of more than half of the world's supply of fats and oils and all but a small part of its protein feed. Most of the major kinds have been produced in growing volume during the past decade.

In terms of quantity harvested, soybeans, cottonseed, and peanuts are the leading oilseeds. Rapidly expanding cultivation of soybeans in the United States has put that crop in first place. Mainland China is the only other large soybean producer (map, p. 34). Peanuts are grown in many parts of the Tropics and some warmer regions of the Temperate Zones (map, p. 35). So is cottonseed; a byproduct of cotton cultivation for fiber, its geographic distribution corresponds to that of fiber (map, p. 52).

Other important oilbearing crops include sunflowerseed, produced mainly in the U.S.S.R.; rapeseed, produced principally in India and Mainland China; flaxseed, largely produced in Argentina and North America; olives, the traditional source of oil in

the Mediterranean area; and the tropical palm products—coconuts, obtained mostly from the Far East in the form of copra, and oil palm fruit, coming mostly from Africa as palm oil and palm kernels.

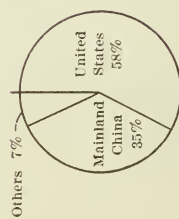
Oilseeds vary greatly in yield of oil. The range extends from a low of 15 percent for cottonseed to a high of 63 percent for copra. Many kinds are consumed as such for food. Of the quantities crushed locally for oil or exported for crushing, crops grown in the United States, Africa, and the Far East yielded more than two-thirds of world vegetable oil production in 1957-1961. In those years, soybean, peanut, cottonseed, and palm oils accounted for about two-thirds of the total (charts, p. 36).

Africa, the United States, and the Far East are also the major exporters of oilseeds and oils, most of which are shipped to Western Europe (map, p. 37). Western Europe, with its intensive livestock industry, absorbs most exports of oilcake as well.

World Soybean Production, Average 1957-61



PERCENT OF
WORLD PRODUCTION



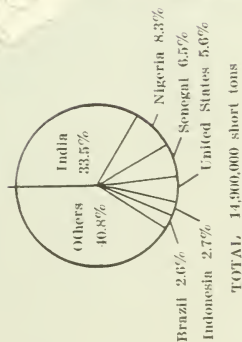
TOTAL 974,538,000 bushels

Each dot represents
500,000 bushels

World Peanut Production, Average 1957-61



PERCENT OF
WORLD PRODUCTION



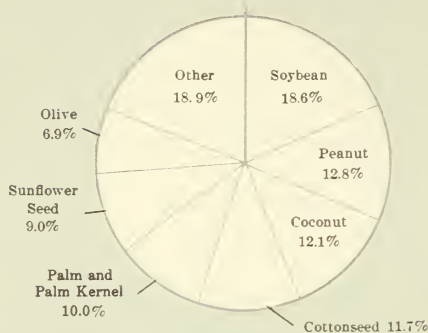
Peanuts, in shell

Each dot represents
10,000 short tons

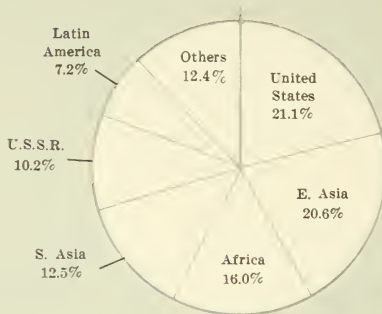
World Production of Vegetable Oils

Average 1957-61*

BY KINDS



BY REGIONS



TOTAL 18,600,000 short tons

Leading Producers



* Chiefly castor, babassu, cottonseed and peanut oil.

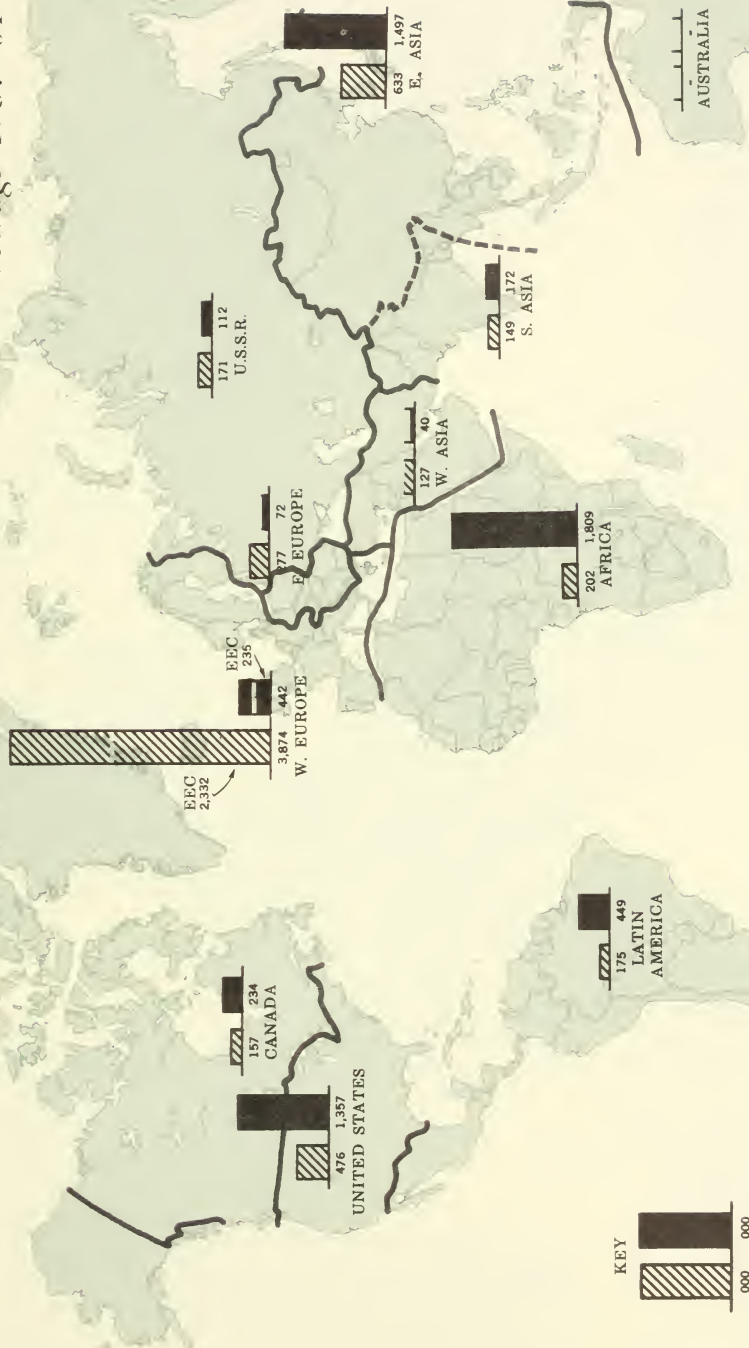
* Years indicated are those in which the predominant share of the given oil was produced from its related raw material. Estimates of U.S. and Soviet oil production include actual oil produced plus the

oil equivalent of exported oilseeds; estimates for other countries are based on the production of the various oilseeds times the estimated normal proportions crushed for oil.

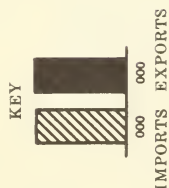
USDA NEG. ERS 2432-63(10)

World Trade in Vegetable Oils and Oilseeds, in Oil Equivalent,

Average 1957-61



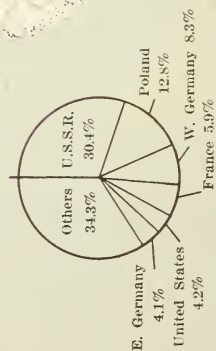
Figures near charts are in thousand short tons



AUSTRALIA
 NEW ZEALAND

World Potato Production, Average 1957-61

PERCENT OF
WORLD PRODUCTION



TOTAL 6,228,500,000 hundredweight

Each dot represents
1,000,000 cwt.

DATA NOT
AVAILABLE

STARCHY ROOTS AND TUBERS are a staple of the diet in most parts of the world. Potatoes take first place among them; production is heavily concentrated in Europe and the Soviet Union (map, p. 38), where potatoes are an important feed as well as food crop. Elsewhere, roots and tubers are produced mostly for food. Many countries with warm climates ill suited for potato cultivation grow large quantities of cassava and also sweetpotatoes, yams, or cocoyams for local use. In much of tropical western Africa, these crops contribute more to the calorie value of the food supply than grain. However, they are a poor source of protein and heavy consumption of them in Africa is often associated with symptoms of protein deficiency.

Although only 1 percent of the potato crop enters world trade, for consumption or seed, exports total about 3 million tons a year. Most of the trade is within Europe.

Sugar is another important source of calories, especially in northwestern Europe, temperate North America, some parts of Latin America, South Africa, and Oceania. Along with such tropical products as coffee, cocoa, and tea, it ranks high as an export crop of underdeveloped regions.

These regions produce cane sugar, noncentrifugal as well as centrifugal. Beet sugar production, all centrifugal, is confined for the most part to Europe, including the U.S.S.R., and temperate North America (map, p. 40). In 1957-1961 it accounted for 42 percent of world output of centrifugal sugar.

Beet sugar, however, plays only a small role in world trade. Except for eastern Europe, the beet-sugar-producing regions are all net importers of sugar. Latin America is by far the major exporting region (map, p. 41). Its predominance reflects Cuba's sugar export trade in the main. Cuba alone supplied three-fifths of Latin American and one-third of world sugar exports in 1957-1961, a share that has since declined sharply.

The United States is the leading sugar importer. It normally takes about one-fourth of world exports, not counting nearly 2 million tons shipped annually to the mainland from Hawaii and Puerto Rico, but not classed as international trade even before Hawaii became the 50th state in 1959.

Coffee and cocoa are grown largely for export. Although cultivation of coffee in tropical Africa has expanded rapidly, production remains largely concentrated in Brazil and the northern countries of Latin America (map, p. 42). But while Latin America produced more than three-fourths of the world crop in 1957-1961, it shipped little more than two-thirds of world exports, and stocks piled up. During the same period, Africa had about 18 percent of the world crop and 24 percent of world exports. These are nearly all destined for markets in the United States, the world's largest coffee consumer, and Western Europe (map, p. 43).

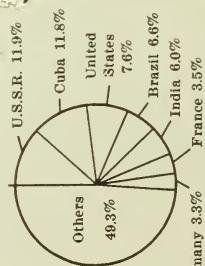
Cocoa is grown mostly in Africa and Latin America (map, p. 44), but Africa produces the bulk of the crop. Ghana accounted for one-third of world cocoa output in 1957-1961 and Nigeria, Cameroon, and the Ivory Coast for 28 percent, compared with 31 percent for all Latin America. The crop is processed into cocoa products chiefly in Western Europe, which absorbed 54 percent of world imports of cocoa beans, and the United States, which took another 30 percent.

All but a small part of the world's tea supply comes from the Far East, which contains the great centers of production (map, p. 45). India and Ceylon grow more than half of world output and ship three-fourths of world exports of tea. Ranking next as producers are Mainland China and Japan, where tea is produced mostly for domestic consumption. Among western markets, the United Kingdom is the largest, taking 47 percent of world imports in 1957-1961. Only 9 percent went to the United States, the next largest importer.

World Sugar Production, Average 1957-61*



PERCENT OF
WORLD PRODUCTION



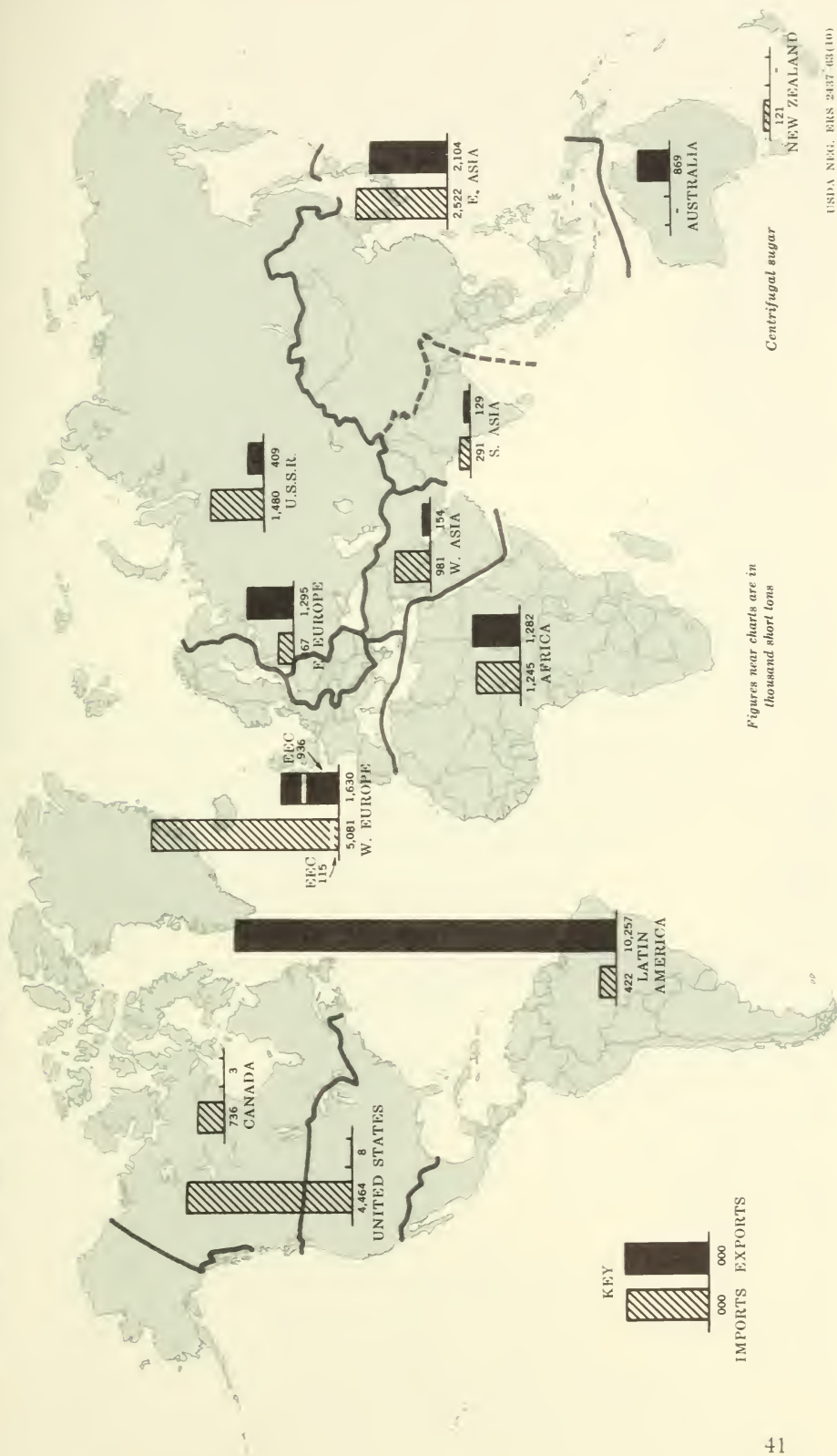
TOTAL 54,745,000 short tons

Each dot represents
25,000 short tons, raw value

Cane sugar

* Centrifugal sugar

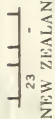
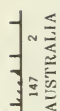
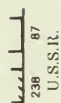
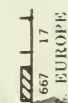
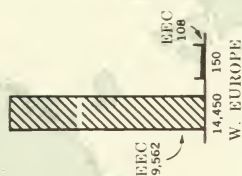
World Trade in Sugar, Average 1957-61



World Coffee Production, Average 1957-61



World Trade in Coffee, Average 1957-61



Figures near charts are in thousand bags*

Green coffee

*Bags of 152.276 pounds each

World Cocoa Production, Average 1957-61

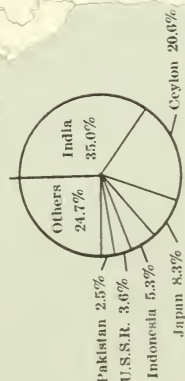


World Tea Production, Average 1957-61



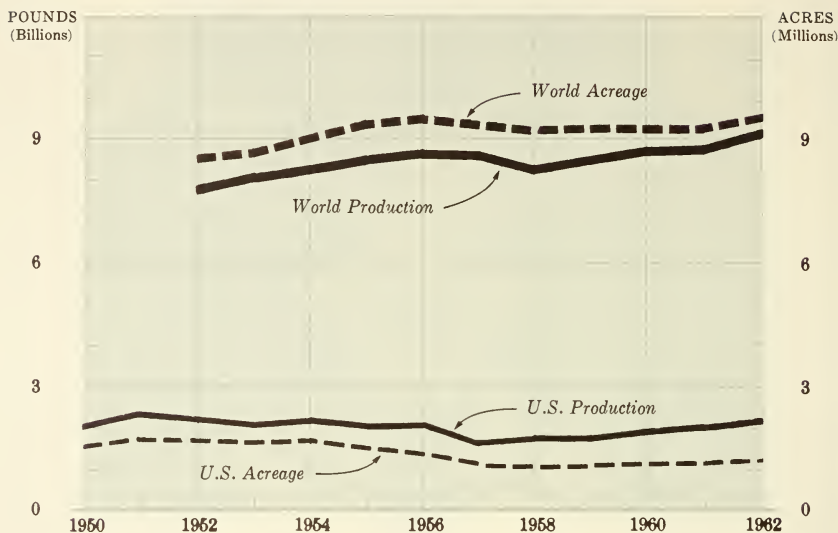
Each dot represents
1,000,000 pounds

PERCENT OF
WORLD PRODUCTION



TOTAL 2,043,870,000 pounds

Tobacco: World and U.S. Production and Acreage, 1950-62



USDA NEG. ERS 2442-63(10)

WORLD PRODUCTION OF TOBACCO has been increasing gradually, as the world population has expanded and per capita consumption has risen in many countries. World production in 1962 approximated 9 billion pounds of leaf tobacco, harvested from 9.5 million acres. This compared with 7.1 billion pounds from 7.1 million acres in 1950.

The United States, the world's leading producer and exporter of leaf tobacco, in 1962 produced about 2.2 billion pounds of leaf tobacco from a harvested area of 1.2 million acres, thus accounting for nearly one-fourth of the total world crop. Mainland China, which had the largest tobacco acreage, was second as a producer (charts, p. 48).

Following the United States and Mainland China as tobacco producers were India, the Soviet Union, Brazil, Japan, Turkey, and Southern Rhodesia.

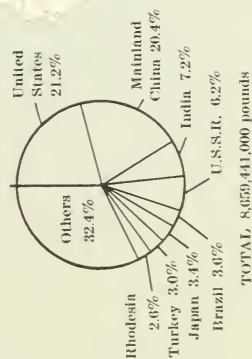
All those countries, except the Soviet Union and Turkey, are important growers of flue-cured tobacco—an important ingredient in light-type cigarettes. Both the U.S.S.R. and Turkey are major growers of oriental tobacco used in oriental-type cigarettes. Oriental leaf grown in Turkey, Greece, and other areas also is shipped abroad and blended with flue-cured and light air-cured tobaccos in the manufacture of the American-type blended cigarette. Burley tobacco, also an important ingredient in the American-type blended cigarette, is produced mainly in the United States, although its production is being expanded in many countries.

World production of tobacco generally is trending toward light types of leaf—flue-cured, oriental, and burley—and away from the darker kinds of leaf.

World Tobacco Production, Average 1957-61



PERCENT OF
WORLD PRODUCTION



Each dot represents
5,000,000 pounds

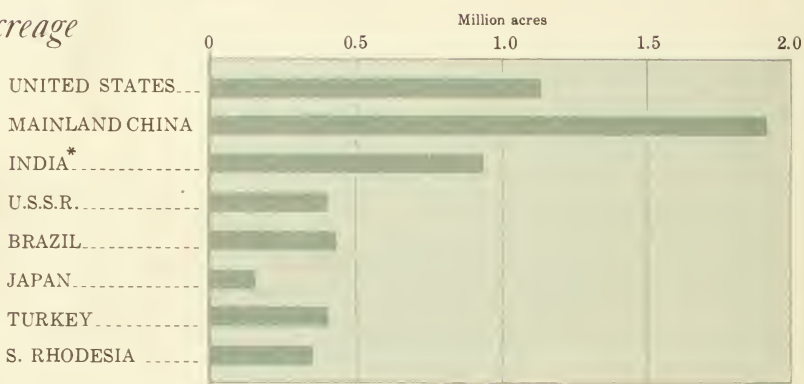
Tobacco: 8 Leading Producers

Average 1957-61

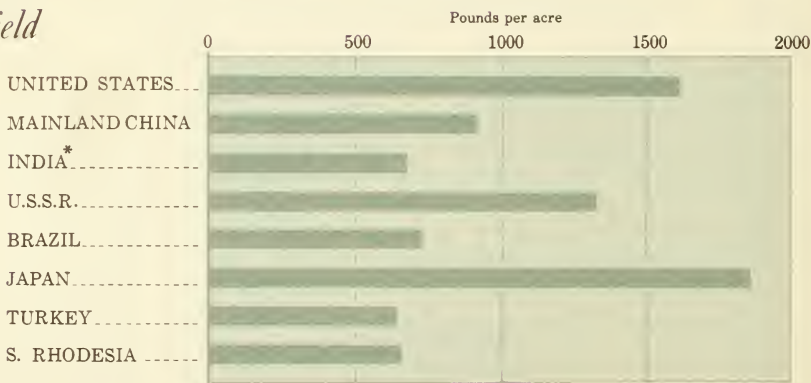
Production



Acreage



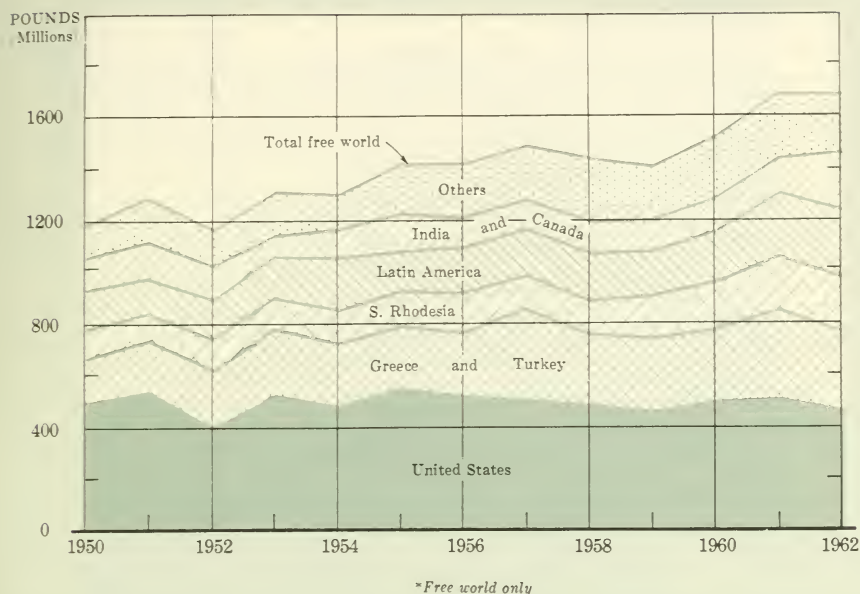
Yield



*Includes Jammu and Kashmir, status in dispute

USDA NEG. ERS 2444-63(10)

World Tobacco Exports, 1950-62*



USDA NEG. ERS 2445-63(10)

FREE WORLD EXPORTS of unmanufactured tobacco in 1962 totaled a record 1.68 billion pounds—up about 500 million pounds from the 1950 level.

The strong demand in world markets in 1962 reflected larger world consumption of cigarettes, shortages of domestically produced leaf in some European countries, and heavier demands from Soviet-bloc areas for leaf from free world sources.

The United States, whose tobacco exports have been maintained on an absolute basis, has not shared in the expansion of the world's tobacco export trade. The United States share of free world exports in 1962 was only about 28 percent, compared with an average of 38 percent in 1950-1954.

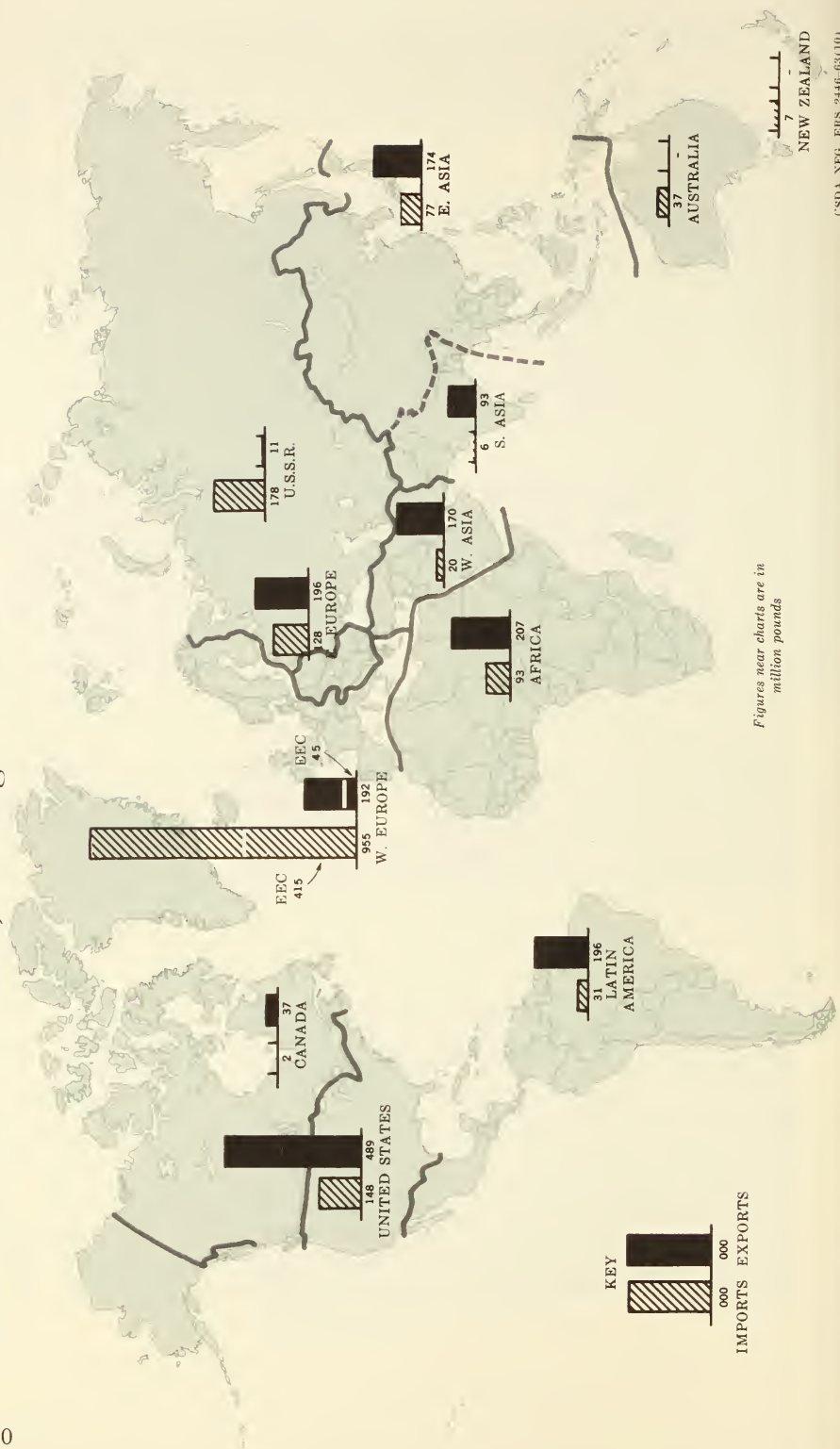
Most of the gains in exports have been accounted for by Southern Rhodesia, Turkey, India, Greece, Brazil, the Philippines, Japan, Italy, and Colombia.

Western Europe is the largest importing region (map, p. 50). It includes most of the principal importing countries, among them the two leaders—the United Kingdom and West Germany. The U.S.S.R. was in third place in 1957-1961 and the United States fourth.

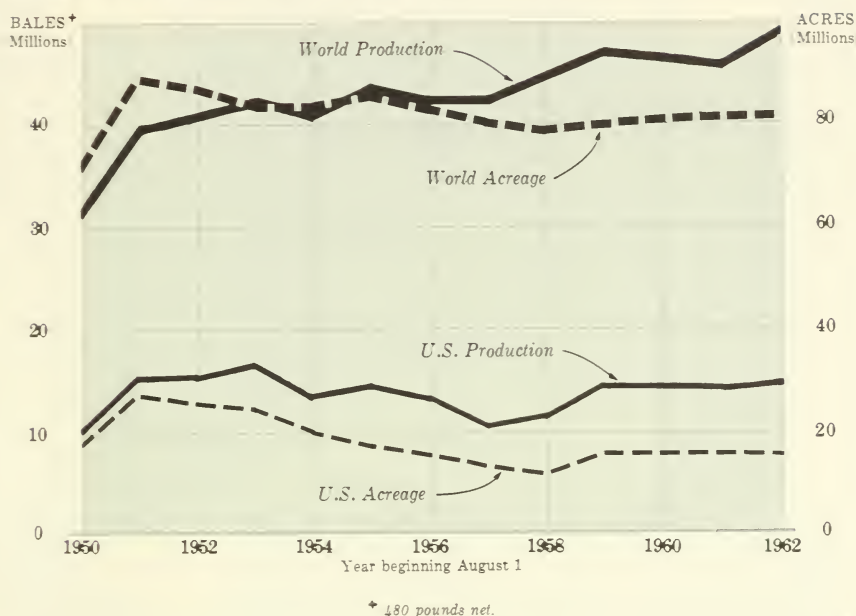
Flue-cured tobacco is the most important kind moving in free world trade. In 1962, flue-cured tobacco accounted for 46 percent of the total—a little higher percentage than in 1961. Oriental tobacco ranks next to flue-cured in importance in world trade.

Free world export trade is expected to increase further, but it is not likely that future annual gains in trade will equal those of the past several years because of the trend towards self-sufficiency in some countries and smaller year-to-year increases in the use of cigarettes.

World Trade in Tobacco, Average 1957-61



Cotton: World and U.S. Production and Acreage, 1950-62



COTTON ranks first among textile fibers in value of output. It is widely produced in the warmer latitudes (map, p. 52), chiefly as a rain-grown crop but also under irrigation in such dry areas as the southern part of the Soviet Union, United Arab Republic, Mexico, and western United States.

World production has trended upward during the past decade. While the acreage devoted to cotton showed some decline, yields per acre increased, reflecting an expanded use of improved seed, more efficient cultural practices, and extensive development of irrigation systems. On the average in the seasons 1957-1961, about 16 percent more cotton was harvested from 4 percent fewer acres than in the early fifties.

In the United States, the leading producer of cotton, output has remained

relatively stable and below the average for the early fifties. Like many other producers, the United States increased cotton yields per acre. Under the United States cotton price support program, however, it also reduced the acreage in cotton by more than enough to offset the expansion in the rest of the world. The net result was a drop in the United States share of world production from 38 percent in 1950-1954 to 29 percent in 1957-1961.

Mainland China and the U.S.S.R. were the world's second and third largest cotton producers. India had the world's largest acreage in cotton, but its low average yields per acre made it fourth as a producer (charts, p. 53). Leading in average yields per acre were the U.S.S.R., United Arab Republic, and Mexico, where all or nearly all of the cotton is irrigated.

World Cotton Production, Average 1957-61

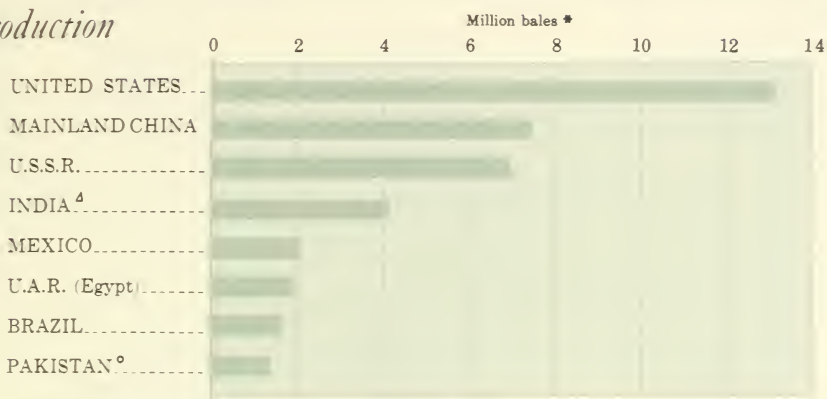
52



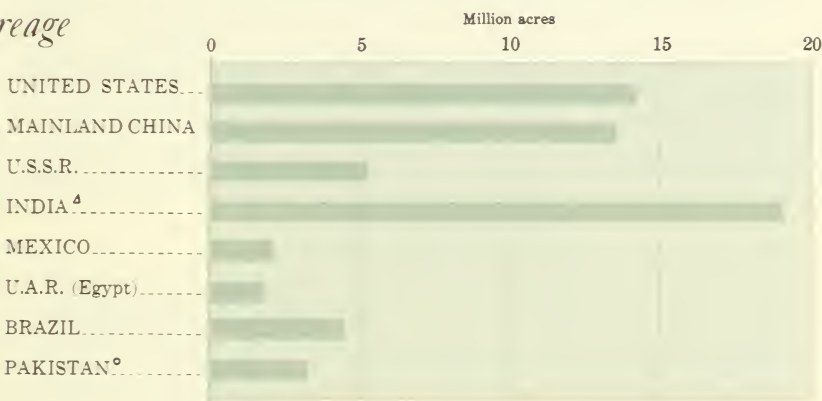
Cotton: 8 Leading Producers

Average 1957-61

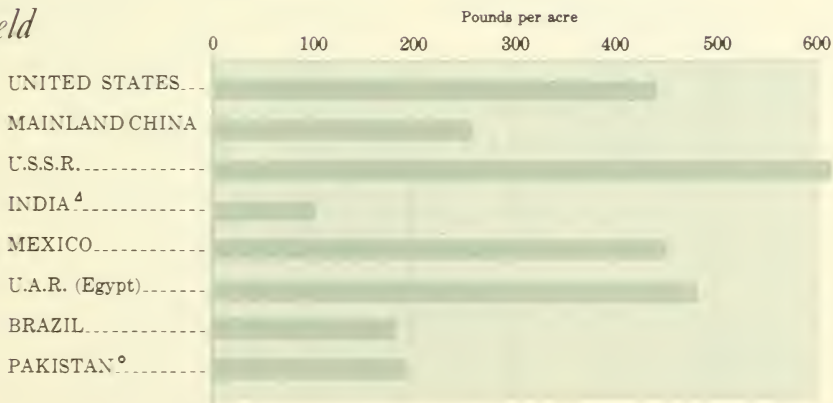
Production



Acreage



Yield



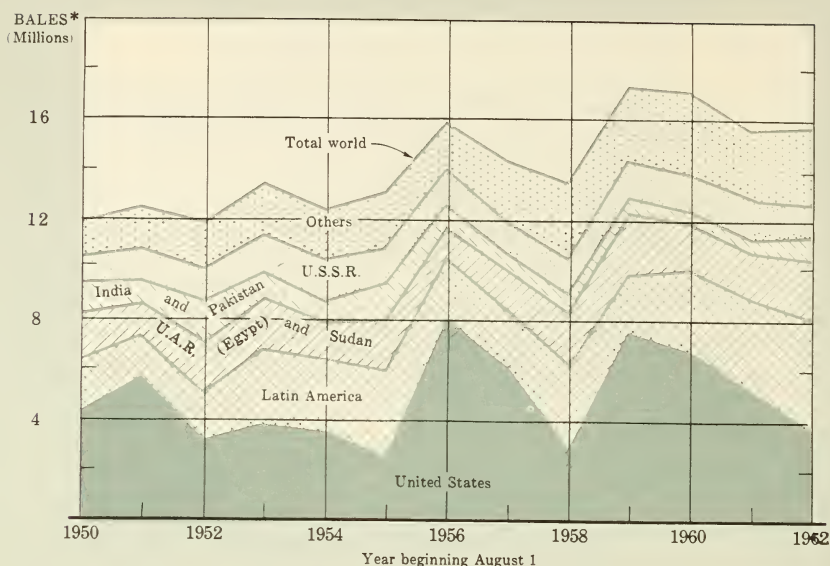
* 480 pounds net

^Δ Includes Jammu and Kashmir, status in dispute

[°] Excludes Jammu and Kashmir

USDA NEG. ERS 2449-63(10)

World Cotton Exports, 1950-62



*480 pounds net.

USDA NEG. ERS 2450-63(10)

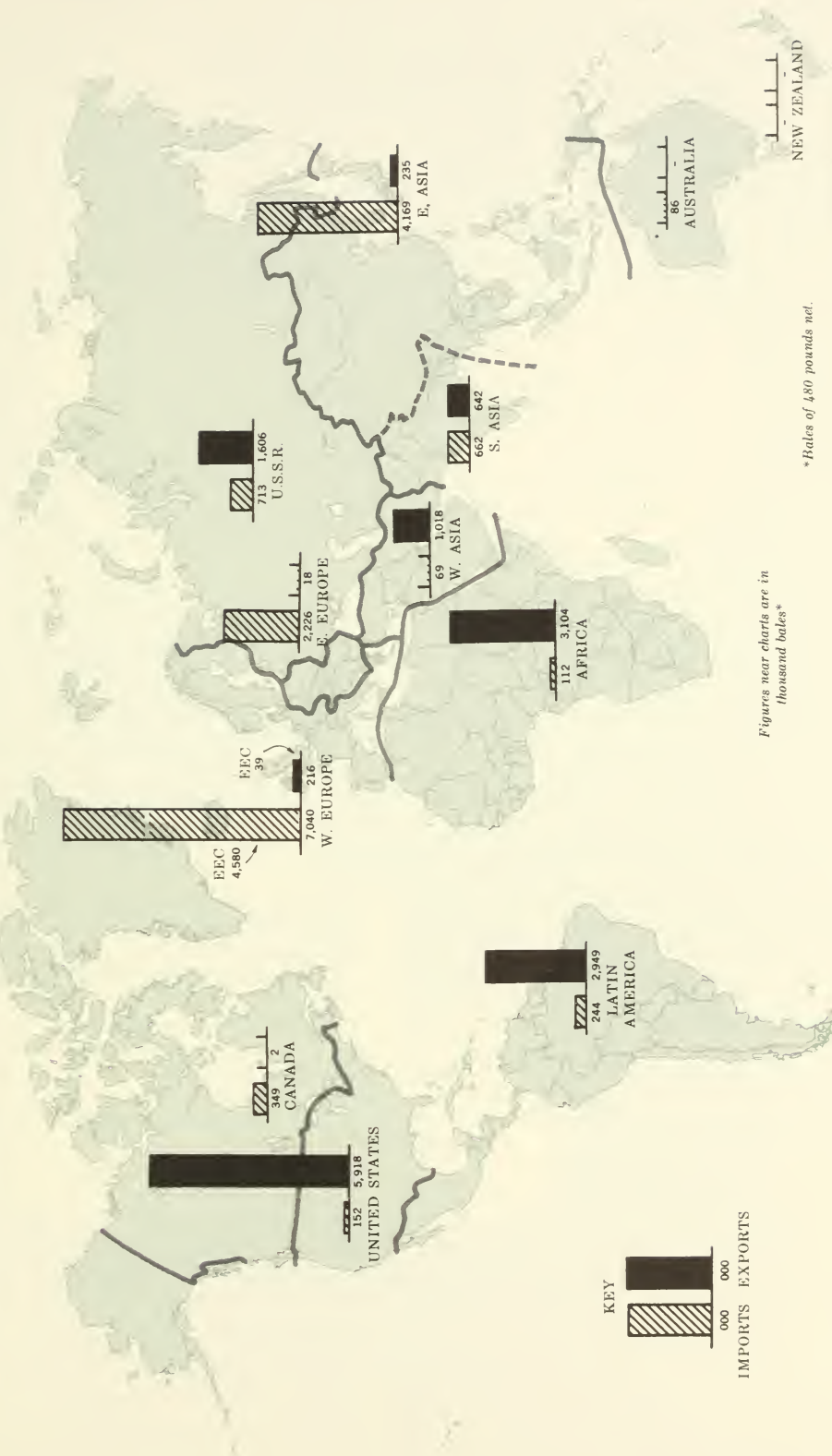
WORLD COTTON EXPORTS have moved irregularly upward since the war to average 24 percent higher in the season 1957-1961 than in 1950-1954.

The United States is the world's largest exporter as well as producer of cotton. Exports from the United States have shown marked ups and downs, depending on changes in foreign supply and demand and on the competitiveness of United States prices. In the season 1962-1963, United States shipments declined to 3.4 million bales, the lowest point since 1958-1959, when only 2.9 million were shipped, and well below annual average exports of 5.9 million bales during the calendar years 1957-1961. In that period, the United States share of world cotton exports amounted to 37 percent, compared with only about one-third in 1950-1954.

Exports from Latin America, Africa, and especially West Asia also increased, although many countries in these regions have developed textile industries that absorb a considerable share of regionally produced cotton and compete with the traditional cotton-importing and textile-exporting countries. In South Asia, exports declined and were even slightly smaller than imports in 1957-1961.

Cotton purchases by traditional importers have been influenced by competition not only from new textile producers but also from manmade fibers as a raw material for the textile industry. Nevertheless, Western Europe remains the largest cotton-importing region (map, p. 55). East Asia continues to rank next. Japan, the world's leading importer, alone took nearly a fifth of all cotton imports in 1957-1961.

World Trade in Cotton, Average 1957-61



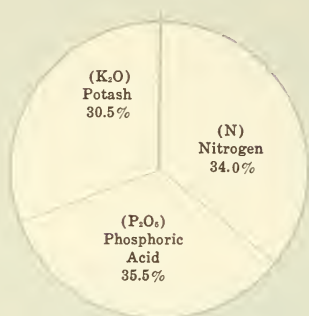
Figures near charts are in thousand bales*

* Bales of 480 pounds net.

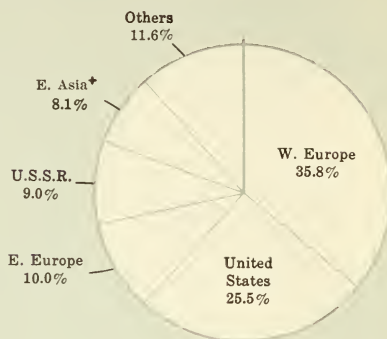
Fertilizer: World Consumption

Average 1957-61*

BY KINDS

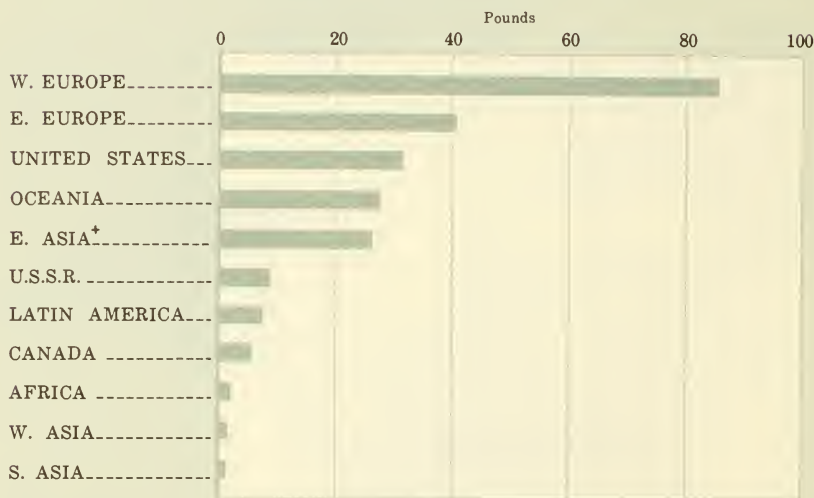


BY REGIONS



TOTAL 25,335,000 short tons

Consumption Per Acre of Cropland

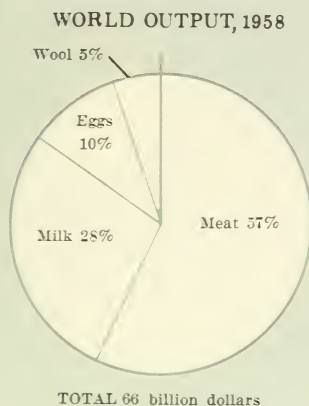


*Excluding Communist Asia

* Commercial fertilizers, excluding ground rock phosphate, in terms of plant nutrient content. Calendar year for U.S.S.R.; year ending June for other regions.

USDA NEG. ERS 2452-63(10)

MAJOR LIVESTOCK PRODUCTS:



USDA NEG. ERS 2453-63(10)

MEAT, MILK, EGGS, AND WOOL (including the feed that goes into their production) represent about two-fifths of the value of world agricultural output. All except wool are produced largely in Western Europe and the United States. Together, these two highly developed, well-to-do regions contributed more than two-fifths of the world's livestock production in 1958.

The heavy concentration of livestock production in Western Europe and the United States reflects the large numbers of productive livestock and high yields per animal unit. Livestock products are the chief source of farm income in both regions. Both devote much of their cropland to growing livestock feed. Both also use modernized methods in breeding, feeding, and care of livestock.

In the underdeveloped regions, in contrast, the livestock industry is small and backward. Little cropland can be spared for raising livestock feed. Animals must forage for themselves, mostly on rough pasture and poor rangeland. Yields per animal are low, and, even where the livestock population is numerous, livestock products amount

to considerably less than half the value of farm output.

Both developed and underdeveloped regions, and particularly South Asia, the United States, Europe, and South America, have a large share of the world's cattle population (map, p. 58). India alone contains more than twice as many cattle (including buffaloes) as the United States (charts, p. 62), although on a per capita basis the United States slightly outranks India. In India, as in other Far Eastern countries, cattle furnish draft power and are little used for meat or milk. In South America they are kept chiefly for meat. Dairy breeds predominate in Europe. Both beef and dairy breeds are important in the United States.

Hog production centers chiefly in Europe, including the U.S.S.R., the United States, Brazil, and Mainland China (map, p. 59). Sheep are widely distributed throughout the world (map p. 60) and goats in the Far East, West Asia, Africa, and Latin America (map, p. 61).

Wool is the main product of the sheep industry in Australia, the world's largest sheep and wool producer (charts, pp. 62 and 63). In most other advanced countries, breeding has emphasized both meat and wool. In many underdeveloped countries, sheep and goats are a principal source of meat and milk.

Over half of the wool produced is exported but only a small part of the meat, dairy products and eggs. Shipments by the 4 major meat exporters consist mainly of beef from Argentina and Australia, mutton and lamb from New Zealand, and bacon from Denmark. The United Kingdom alone takes more than half of all exported supplies.

New Zealand, Denmark, and the Netherlands are the leading exporters of dairy products. Butter goes mostly to the United Kingdom, cheese principally to the United Kingdom and West Germany, and processed milk largely to countries in Asia. West Germany leads as an importer and the Netherlands as an exporter of eggs.

World Cattle Numbers, Average 1957-61*



World Hog Numbers, Average 1957-61



World Sheep Numbers, Average 1957-61

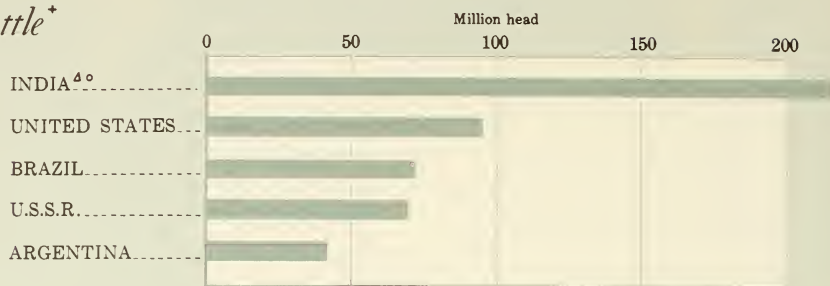


World Goat Numbers, Average 1957-61

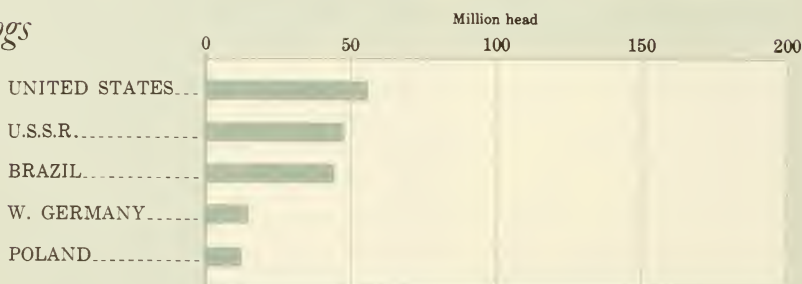


Cattle, Hogs, Sheep, and Goats— Leading Countries, Average 1957-61*

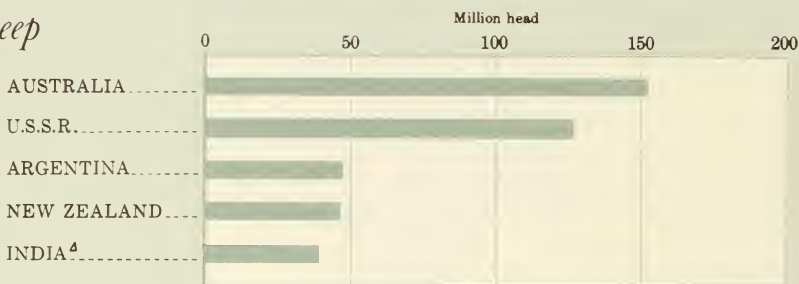
Cattle*



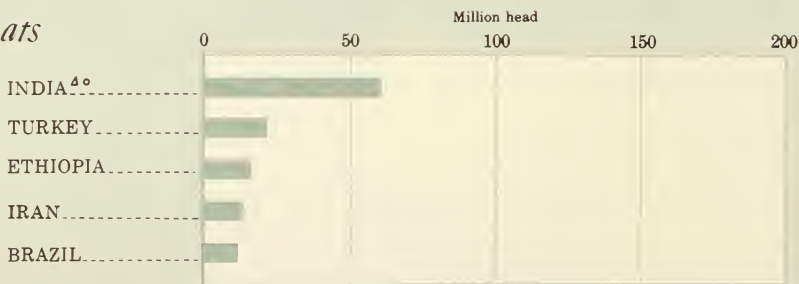
Hogs



Sheep



Goats



*Excluding Mainland China

†Including buffaloes

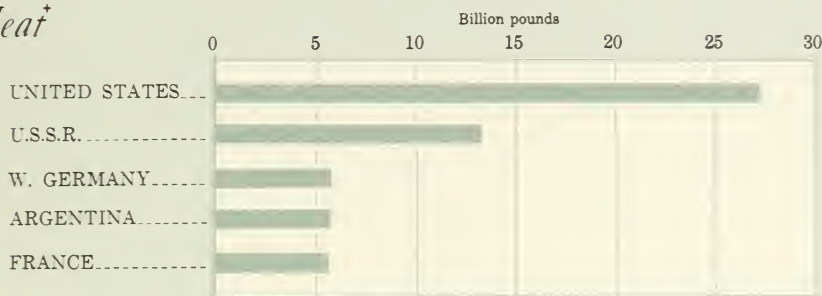
ΔIncludes Jammu and Kashmir, status in dispute

◊Cattle, average 1959 and 1961; goats 1961

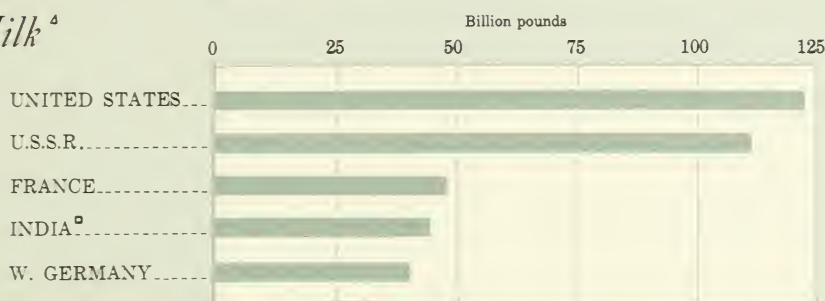
USDA NEG. ERS 2458-63(10)

Meat, Milk, Eggs, and Wool— Leading Countries, Average 1957-61*

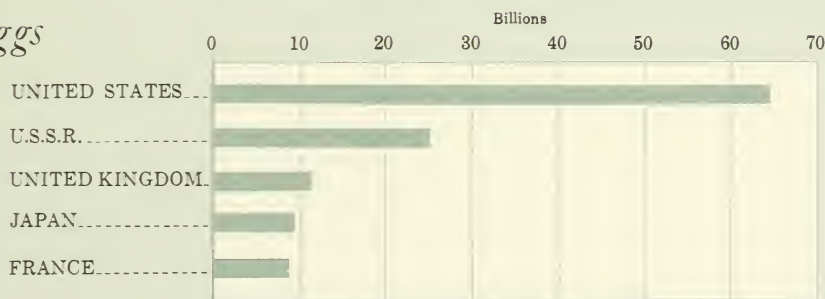
Meat†



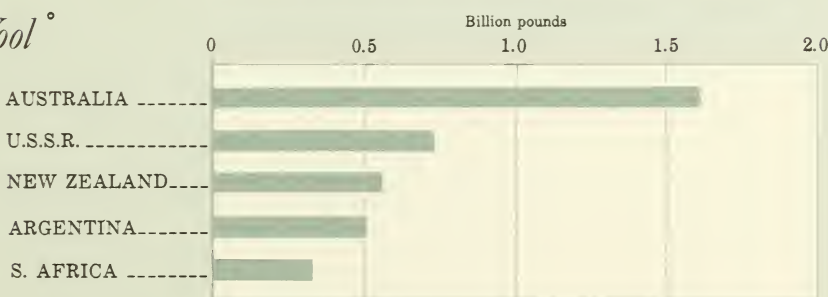
Milk‡



Eggs



Wool°



*Excluding Mainland China.

†Red meat only.

‡Cow's milk only.

°Greasy basis.

◊Includes Jammu and Kashmir; status in dispute. Average 1959-61 for cow and buffalo milk.

USDA NEG. ERS 2459-63(10)

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